97-84144-24

Pan American Union

The Pan American Union

Washington, D.C.

1921

97-84144-24
MASTER NEGATIVE #

COLUMBIA UNIVERSITY LIBRARIES
PRESERVATION DIVISION

BIBLIOGRAPHIC MICROFORM TARGET

ORIGINAL MATERIAL AS FILMED - EXISTING BIBLIOGRAPHIC RECORD

```
  OCLC:  37107488            Rec stat:    n
  Entered:    19970612       Replaced:    19970612      Used:    19970612
- Type:  a     ELvl:  K     Srce:  d     Audn:        Ctrl:        Lang:  eng
  BLvl:  m     Form:  a     Conf:  0     Biog:        MRec:        Ctry:  dcu
               Cont:        GPub:        Fict:  0     Indx:  0
  Desc:  a     Ills:  a     Fest:  0     DtSt:  s     Dates: 1921,     ↔
-   1  040     PR1 ▾c PR1 ↔
-   2  007     h ▾b d ▾d a ▾e f ▾f a--- ▾g b ▾h a ▾i c ▾j p ↔
-   3  007     h ▾b d ▾d a ▾e f ▾f a--- ▾g b ▾h a ▾i a ▾j p ↔
-   4  007     h ▾b d ▾d a ▾e f ▾f a--- ▾g b ▾h a ▾i b ▾j p ↔
-   5  049     PR1A ↔
-   6  110 2   Pan American Union. ↔
-   7  245 13  The Pan American Union ▾h [microform] : ▾b Mexico : general
descriptive data / ▾c [Pan American Union]. ↔
-   8  246 30  Mexico, general descriptive data ↔
-   9  260     Washington, D.C. : ▾b Pan American Union, ▾c 1921. ↔
-  10  300     51 p. : ▾b ill. ; ▾c 23 cm. ↔
-  11  500     Cover title. ↔
```

RESTRICTIONS ON USE: *Reproductions may not be made without permission from Columbia University Libraries.*

TECHNICAL MICROFORM DATA

FILM SIZE: 35mm **REDUCTION RATIO:** 10:1 **IMAGE PLACEMENT:** IA (IIA) IB IIB

DATE FILMED: 7-24-97 **INITIALS:** HP

TRACKING # : 25864

FILMED BY PRESERVATION RESOURCES, BETHLEHEM, PA.

INTENTIONAL
SECOND
EXPOSURES DUE TO
PHOTOGRAPHS

COMPLIMENTS OF
THE MEXICAN CHAMBER OF COMMERCE
OF THE UNITED STATES, INC.
WOOLWORTH BUILDING NEW YORK CITY

FRANK TANNENBAUM
FEB 16 1938

The PAN AMERICAN UNION

MEXICO

GENERAL DESCRIPTIVE DATA

308
Z
Box 520

If further information regarding Mexico is desired, the Pan American Union will make every effort to provide the same.

L. S. ROWE . . . . . Director General
FRANCISCO J. YÁNES . Assistant Director

WASHINGTON, D. C.
1921

MEXICO IN BRIEF

Area, 767,168 square miles.

Population, 17,000,000 (estimated).

Capital, Mexico City; population 800,000.

The Climate, owing to the varying altitudes, as well as the country's situation, partly in the tropical and party in the temperate zones, is greatly diversified.

Principal Exports: Mineral—oil, silver, copper, lead, antimony, zinc and gold; Vegetable—henequen, coffee, rubber (including guayule), chicle, frijoles, chick peas (garbanzos), ixtle, cabinet woods, zaceton root, tobacco, vanilla, cottonseed and sugar; Animal—cattle, hides, skins and tallow.

Principal Imports: Machinery, tools, hardware, automobiles, cars, textiles and clothing, cotton, lumber, coal, vegetable oils, coke, liquors, grain, drugs and furniture.

Chief Physical Characteristics: Two mountain chains traverse the entire Republic, forming between them a number of valleys and plateaus of various altitudes. The plateau of Anahuac, on which is situated the capital, is the largest and most important.

Means of Approach: Mexico has a coast of some 4,574 miles on the Pacific and 1,727 miles on the Gulf of Mexico and Caribbean Sea. There are 10 major ports on the Gulf coast and 13 on the Pacific, the former having steamship connections direct to the United States, Canada and Europe; the latter to Japan and China, the west coast ports of the United States and Canada. By rail through connections between the roads of the United States and Mexico may be made at 5 points on the border, viz., Nogales, Piedras Negras, Ciudad Juarez, Laredo and Matamoros. From the Guatemalan frontier through railway service to Veracruz and Mexico City has been completed.

May 15 '40 - 2nd Bnk
308
Z
Box 520

MEXICO

HISTORICAL OUTLINE

Not much is known of the history of Mexico prior to the Spanish conquest, 1519–21. Francisco Hernandez de Cordova discovered Yucatan in 1517 and landed at Cape Catoche. Juan de Grijalva one year later landed on the island of Cozumel and named the country New Spain. The country was then under the rule of the Aztec Emperor, Moctezuma II, whose capital was Tenochtitlan, now Mexico City. The Aztecs had been in control of the country about 60 years. Prior to the Aztecs were for about 250 years the Nahualtecs and the Chichimecs who succeeded the Toltecs, whose history goes back to the seventh century. All of these nations were more or less civilized. The Aztecs called the country Anahuac. When word was brought to the Spanish Governor in Cuba of this empire, an expedition was fitted out under Hernando Cortés who was sent to make a conquest of the country. He landed first on April 12, 1519, on the little island of Ulua in the harbor of Veracruz. From this point he went into the interior and entered the ancient capital on November 8, 1519. Moctezuma was killed on June 30, 1520. The next day the Spaniards were driven from the city. In May, 1521, Cortés began the siege of the city which he succeeded in taking August 13, 1521. This was the end of the Aztec empire.

COAT OF ARMS OF MEXICO

Hernando Cortés was appointed Governor of New Spain in the year 1522.

In 1528 the first audencia was inaugurated with Nuño de Guzman, President.

In the year 1535 the viceroyalty of New Spain was created, including all of the Spanish possessions in North and Central America, Don Antonio de Mendoza being appointed viceroy.

MEXICO'S NATIONAL PALACE OR THE OFFICIAL HOME OF THE PRESIDENT OF THE REPUBLIC.

This building occupies a whole square, fronting 700 feet on Plaza Mayor of Zocalo. It is occupied by the President's offices and other branches of the Government. One of the most noted sections is that called the hall of ambassadors, which runs nearly half the length of the front of the building. In the cupola above the central entrance is preserved the liberty bell of Mexico, which is rung on special occasions.

New Spain was successively governed by 62 viceroys, the last being Don Juan O'Donoju, who withdrew in the year 1821 when independence was consummated.

A Mexican priest, Don Miguel Hidalgo y Costilla, was the leader of the movement for independence. On September 16, 1810, he issued a declaration of independence (*El Grito de Dolores*) and subsequently succeeded in gaining several victories over the Royalists. He was finally defeated and executed on July 30, 1811.

The patriotic cause was taken up by another priest, Don José Maria Morelos, who was executed on December 22, 1815. General Iturbide, who was finally to decide the struggle in favor of the patriots, entered the City of Mexico on September 27, 1821, at the head of the patriot army. Here was evolved what was known as "the plan of Iguala," whereby a King was to be elected for Mexico. To this plan Viceroy O'Donoju agreed.

In the meantime a congress of Mexican patriots at Chilpancingo on November 6, 1813, had formally declared the independence of Mexico from Spain.

Under the plan of Iguala, General Iturbide was elected Emperor of Mexico, and on July 21, 1822, was crowned at the City of Mexico, adopting the title of Augustin I. The Empire was but short lived. Gen. Antonio Lopez de Santa Ana proclaimed the Republic on December 6, 1822, and the Emperor was forced to abdicate on March 19, 1823, and to leave the country. Upon his return, in the year following, he was sentenced to death and executed at Padilla on July 19, 1824.

Gen. Guadalupe Victoria became the President of the Republic on October 10, 1824. Spain sought once more to regain control of her former possession, landing a strong force at Tampico, in July, 1829, that marched to the capital. The Spaniards were, however, completely routed by the patriots on September 10.

In this same year, 1829, the United States recognized the independence of Mexico and Gen. Vicente Guerrero became President and was deposed December 23rd. Early in 1830 Gen. Anastasio Bustamente became President to be succeeded two years later by Gen. Manuel Gomez Pedraza who in turn was followed in 1833 by Gen. Antonio Lopez de Santa Ana. In 1835 Gen. Miguel Barragan *ad interim* and later in the year Señor José Corro *ad interim*. The latter served until Gen. Bustamente again became President in 1837. Meanwhile, on December 28, 1836, Spain finally recognized Mexican independence and earlier in the year Texas declared its independence.

MEXICO'S NATIONAL PALACE OR THE OFFICIAL HOME OF THE PRESIDENT OF THE REPUBLIC.

This building occupies a whole square, fronting 700 feet on Plaza Mayor of Zocalo. It is occupied by the President's offices and other branches of the Government. One of the most noted sections is that called the hall of ambassadors, which runs nearly half the length of the front of the building. In the cupola above the central entrance is preserved the liberty bell of Mexico, which is rung on special occasions.

New Spain was successively governed by 62 viceroys, the last being Don Juan O'Donoju, who withdrew in the year 1821 when independence was consummated.

A Mexican priest, Don Miguel Hidalgo y Costilla, was the leader of the movement for independence. On September 16, 1810, he issued a declaration of independence (*El Grito de Dolores*) and subsequently succeeded in gaining several victories over the Royalists. He was finally defeated and executed on July 30, 1811.

The patriotic cause was taken up by another priest, Don José Maria Morelos, who was executed on December 22, 1815. General Iturbide, who was finally to decide the struggle in favor of the patriots, entered the City of Mexico on September 27, 1821, at the head of the patriot army. Here was evolved what was known as "the plan of Iguala," whereby a King was to be elected for Mexico. To this plan Viceroy O'Donoju agreed.

In the meantime a congress of Mexican patriots at Chilpancingo on November 6, 1813, had formally declared the independence of Mexico from Spain.

Under the plan of Iguala, General Iturbide was elected Emperor of Mexico, and on July 21, 1822, was crowned at the City of Mexico, adopting the title of Augustin I. The Empire was but short lived. Gen. Antonio Lopez de Santa Ana proclaimed the Republic on December 6, 1822, and the Emperor was forced to abdicate on March 19, 1823, and to leave the country. Upon his return, in the year following, he was sentenced to death and executed at Padilla on July 19, 1824.

Gen. Guadalupe Victoria became the President of the Republic on October 10, 1824. Spain sought once more to regain control of her former possession, landing a strong force at Tampico, in July, 1829, that marched to the capital. The Spaniards were, however, completely routed by the patriots on September 10.

In this same year, 1829, the United States recognized the independence of Mexico and Gen. Vicente Guerrero became President and was deposed December 23rd. Early in 1830 Gen. Anastasio Bustamente became President to be succeeded two years later by Gen. Manuel Gomez Pedraza who in turn was followed in 1833 by Gen. Antonio Lopez de Santa Ana. In 1835 Gen. Miguel Barragan *ad interim* and later in the year Señor José Corro *ad interim*. The latter served until Gen. Bustamente again became President in 1837. Meanwhile, on December 28, 1836, Spain finally recognized Mexican independence and earlier in the year Texas declared its independence.

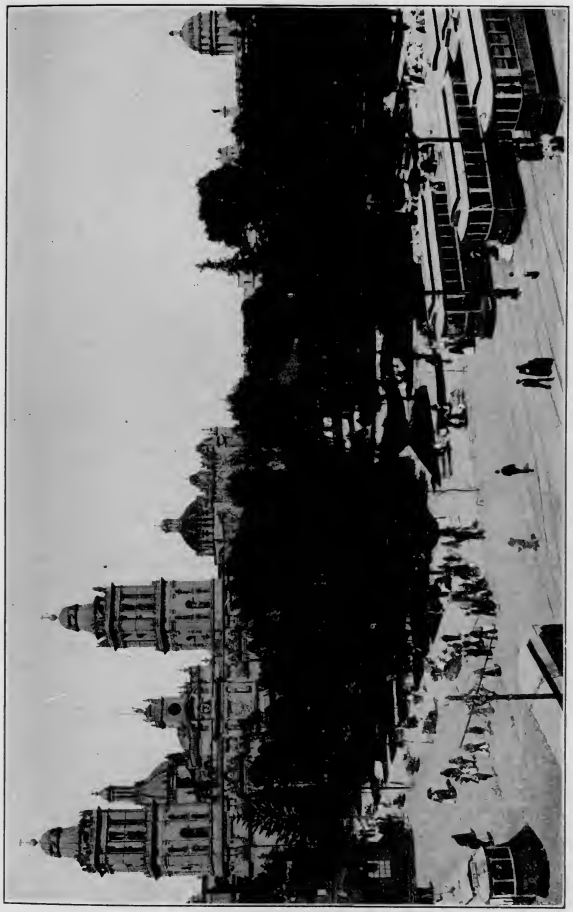
Gen. Santa Ana again came in in 1839. Generals Nicolas Bravo and Valentin Canalizo in 1843 and Gen. José Herrera from 1844 to 1846. In December, 1845, Texas was admitted to the Union of the United States of America. This led to war with the United States in April, 1846, which was concluded by the treaty of Guadalupe of February 2, 1848.

From 1846 to 1857 there were a number of changes in the Presidency. In 1857 Don Benito Juarez came in and remained President up to the time of his death in 1872.

The intervention of the European powers, France, England and Spain, occurred in 1862, during President Juarez's term. England and Spain very early withdrew. The action of France resulted in the establishment of the Mexican Empire by Napoleon III, who placed the Austrian Prince, Maximilian, upon the throne. He was crowned on June 12, 1864, but deserted by Napoleon he was defeated and executed at Queretaro, together with his generals, Miramon and Mejia, June 19, 1867.

Don Benito Juarez was succeeded in 1872 by Sebastian Lerdo de Tejada, who, in 1877, was succeeded by General Porfirio Diaz. Gen. Diaz was succeeded in 1880 by Gen. Manuel Gonzalez who remained in office until Gen. Diaz again became President in 1884. From 1884 until 1911 Gen. Diaz remained at the head of the government. In May, 1911, he resigned and was succeeded by Francisco de la Barra as Provisional President, who served until Francisco Madero was elected (October, 1911) to office as Constitutional President. Following the death of President Madero (February, 1913), General Victoriano Huerta assumed the executive power. General Huerta resigned July 15, 1914, and his Minister of Foreign Relations, Dr. Francisco Carbajal, assumed the presidency. Meanwhile, the States of Coahuila, Sonora and Chihuahua and other sections of the country, never recognized General Huerta or his successor Dr Carbajal. The leader of that party was Señor Venustiano Carranza, Constitutional Governor of the State of Coahuila. On August 19, 1914, Señor Carranza entered the city of Mexico. On Octover 19, 1915, the United States recognized the Carranza Government as the *de facto* government of Mexico, and in the election in March, 1917, Carranza was elected President for the term May 1, 1917, to December 1, 1920.

In May, 1920, President Carranza left Mexico City and was killed on his way to the Gulf coast. Señor Adolfo de la Huerta was elected by Congress to fill the unexpired term to December 1. General Alvaro Obregon was elected September 5, 1920, by a vote of 1,131,751



THE CATHEDRAL IN MEXICO CITY.

Among the many fine buildings in the city of Mexico the cathedral is undoubtedly of the greatest architectural interest. The corner stone was laid in 1573 upon the site occupied by the great Aztec temple, destroyed by Cortes in 1521. The walls of the edifice were finished in 1615, and the roof completed in 1623, when the first mass was said. It was dedicated in 1667, and finally completed about 20 years later. It occupies an extent of 374 by 187 feet, and is of composite architecture. The facade from which the towers rise is divided by buttresses into three divisions; the lower is Doric, the next above a somewhat exaggerated Ionic, and the upper Corinthian. The whole structure is of stone, ornamented by statues, friezes, bases, and capitals of white marble. The towers are 204 feet in height, and the whole massive structure has an imposing effect.

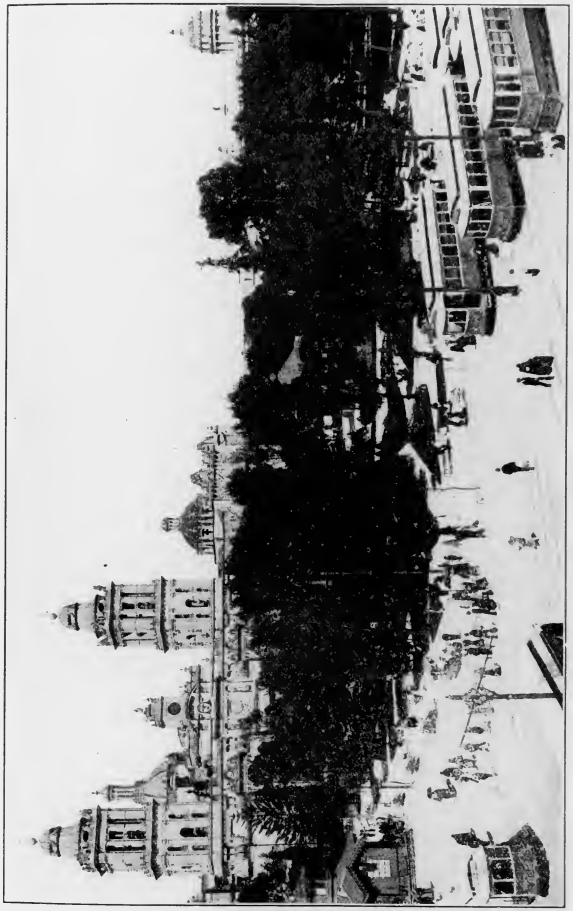
Gen. Santa Ana again came in in 1839. Generals Nicolas Bravo and Valentin Canalizo in 1843 and Gen. José Herrera from 1844 to 1846. In December, 1845, Texas was admitted to the Union of the United States of America. This led to war with the United States in April, 1846, which was concluded by the treaty of Guadalupe of February 2, 1848.

From 1846 to 1857 there were a number of changes in the Presidency. In 1857 Don Benito Juarez came in and remained President up to the time of his death in 1872.

The intervention of the European powers, France, England and Spain, occurred in 1862, during President Juarez's term. England and Spain very early withdrew. The action of France resulted in the establishment of the Mexican Empire by Napoleon III, who placed the Austrian Prince, Maximilian, upon the throne. He was crowned on June 12, 1864, but deserted by Napoleon he was defeated and executed at Queretaro, together with his generals, Miramon and Mejia, June 19, 1867.

Don Benito Juarez was succeeded in 1872 by Sebastian Lerdo de Tejada, who, in 1877, was succeeded by General Porfirio Diaz. Gen. Diaz was succeeded in 1880 by Gen. Manuel Gonzalez who remained in office until Gen. Diaz again became President in 1884. From 1884 until 1911 Gen. Diaz remained at the head of the government. In May, 1911, he resigned and was succeeded by Francisco de la Barra as Provisional President, who served until Francisco Madero was elected (October, 1911) to office as Constitutional President. Following the death of President Madero (February, 1913), General Victoriano Huerta assumed the executive power. General Huerta resigned July 15, 1914, and his Minister of Foreign Relations, Dr. Francisco Carbajal, assumed the presidency. Meanwhile, the States of Coahuila, Sonora and Chihuahua and other sections of the country, never recognized General Huerta or his successor Dr Carbajal. The leader of that party was Señor Venustiano Carranza, Constitutional Governor of the State of Coahuila. On August 19, 1914, Señor Carranza entered the city of Mexico. On Octover 19, 1915, the United States recognized the Carranza Government as the *de facto* government of Mexico, and in the election in March, 1917, Carranza was elected President for the term May 1, 1917, to December 1, 1920.

In May, 1920, President Carranza left Mexico City and was killed on his way to the Gulf coast. Señor Adolfo de la Huerta was elected by Congress to fill the unexpired term to December 1. General Alvaro Obregon was elected September 5, 1920, by a vote of 1,131,751



THE CATHEDRAL IN MEXICO CITY.

Among the many fine buildings in the city of Mexico the cathedral is undoubtedly of the greatest architectural interest. The corner stone was laid in 1573 upon the site occupied by the great Aztec temple, destroyed by Cortes in 1521. The walls of the edifice were finished in 1615, and the roof completed in 1623, when the first mass was said. It was dedicated in 1667, and finally completed about 20 years later. It occupies an extent of 374 by 187 feet, and is of composite architecture. The facade from which the towers rise is divided by buttresses into three divisions; the lower is Doric, the next above a somewhat exaggerated Ionic, and the upper one Corinthian. The towers are square, ornamented by statues, friezes, bases, and capitals of white marble. The towers are 204 feet in height, and the whole massive structure has an imposing effect.

to 47,442 for Robles Dominguez and 2,357 scattering. General Obregon took his seat on December 1, 1920. His term expires November 30, 1924.

CONSTITUTION AND GOVERNMENT

The present Constitution of the United Mexican States was adopted at Querétaro January 31, 1917, and proclaimed by President Carranza on February 5, 1917. While in the main based upon the Constitution of 1857 and following the form thereof, the new constitution contains important changes.

Under the Constitution Mexico is a Federal Republic consisting of States free and sovereign in all that concerns their internal regime. Both in form and in substance it is similar to the other federal republics of the American continent. It is more centralized than the United States or Brazil and less so than Argentina or Venezuela. The supreme power is divided into executive, legislative and judicial branches, no two of which may be united in a single person or body (Art. 49) except that in cases of invasion, grave disturbance of the pulbic peace or other cause which may place society in great danger or in conflict, the President, in accord with the Council of Ministers and with the approval of Congress may suspend such guarantees as may stand in the way to making rapid and easy front to the situation (Art. 29).

EXECUTIVE

The supreme executive power is vested in a single individual who shall be styled "President of the United Mexican States." The President is elected by direct vote.

The necessary qualifications to be President are: That he be a Mexican citizen by birth in the full exercise of his rights as such and the son of parents Mexican by birth; that he be 35 years of age at the time of election; that he shall have resided in the country during all the year prior to the day of his election; that he does not belong to the ecclesiastical state nor is a minister of any religious cult; that he has not been in active military service for 90 days prior to the day of election; that he be not a Secretary or Under Secretary of State or at least he shall have been separated from such position 90 days prior to the election; that he has not figured directly or indirectly in any tumult, mutiny or military uprising. (Art. 82.)

The term of the President is four years and under the new constitution there is no Vice-President. In case of the death or permanent disability of the President, Congress elects a temporary substitute and calls a new election if the vacancy occurs in the first half of the four-year term, or elects for the remaining period if in the last half. The President cannot succeed himself (Art. 83); nor can he resign (Art. 86), or absent himself from the national territory (Art. 88) without the approval of Congress.

The powers of the President are generally the same as those exercised by other constitutional executives under republican forms of govrnement. The Mexican variants are not many nor fundamental. As elsewhere the chief of the powers is that of promulgating and executing the laws of Congress. Unlike the President of the United States, the Mexican Executive may directly originate legislation; the State legislatures may do the same. Bills proposed by the President or by a State legislature are immediately referred to the appropriate committees, while bills proposed by representatives and senators in Congress follow the ordinary rules of procedure. Other powers of the President, as enumerated by the constitution, are, to appoint and remove cabinet officials, diplomatic agents and the higher grades of military and naval officers; to dispose of the army and navy including the national guard in the public defense; to declare war, upon resolution of Congress; to grant letters of marque upon terms fixed by Congress; to direct diplomatic negotiations and to conclude treaties subject to ratification by Congress; to grant pardons and establish customs houses.

Under Art. 92 "All regulations, decrees and orders of the President must be signed by the Secretary of the Department charged with the dependent office to which the matter belongs, and without this requisite shall not be obeyed."

LEGISLATIVE

There is a close parallel between the Congress of Mexico and that of the United States. Two senators are elected from each State for a term of four years. The Senate renews itself by one half every two years. Elections of both senators and deputies are direct, the latter being apportioned, one deputy to 60,000 population. Senators and deputies must be Mexican citizens by birth, not ecclesiastics, nor in active service in the Federal army or navy, and they must be natives of the state or territory they represent. At the time of the election of each senator and each deputy an alternate is also chosen. The alternate takes the place of the principal in cases of disability, failure to qualify or to attend.

The powers of Congress are: To admit new states or territories upon a two-thirds vote of each house; to legislate in all matters re-

DEPARTMENT OF FOREIGN AFFAIRS OF THE MEXICAN GOVERNMENT.

DEPARTMENT OF COMMUNICATIONS AND PUBLIC WORKS, MEXICO CITY.

These fine edifices are typical of the numerous public buildings of modern style which have been erected in the Mexican capital during recent years.

lating to the Federal District and the territories (unlike the District of Columbia in the United States the Federal District—city of Mexico—is represented as a state in the Mexican Congress); to impose taxes necessary to provide for the budget; to lay down the basis upon which the Executive may contract loans upon the credit of the nation, to approve the said loans and to recognize and order payment of the national debt; to enact tariff laws, to legislate respecting mining, commerce and credit institutions and to establish a single Bank of Issue; to declare war, to raise and maintain the army and navy of the Federal Union and to regulate their organization and service, to lay down rules for the organization, armament and discipline of the national guard; to enact laws respecting citizenship, naturalization, colonization, emigration and immigration, public health, roads, postal service, coinage, weights and measures, public lands, and to organize the diplomatic and consular services.

The Chamber of Deputies has exclusive power: To act as a Returning Board in the election of the President; to overlook the Comptroller's Office and to name the chiefs and other employees of that office; to approve the annual budget, and to impeach public officials.

The Senate has exclusive power: To approve treaties and diplomatic conventions with foreign powers; to confirm nominations made by the President of ministers, diplomatic agents, consuls general, higher officials of the Treasury, colonels and other superior officers of the national army and navy; to authorize the sending of national troops outside the limits of the country or the national guard outside its respective state, the passage of foreign troops through national territory or the remaining of foreign fleets for more than one month in Mexican waters; to try impeachments and to provide for the reorganization of any state government wherein the constitutional powers have broken down.

Mexico, in line with several other Latin American countries, has what is known as the Permanent Committee (Art. 78). This Committee composed of 29 members, 14 senators and 15 deputies, chosen just before adjournment, during the recess of Congress performs many of the functions thereof. The Committee also considers pending legislation and prepares reports on such so as to facilitate the business of the next session.

JUDICIAL

The judicial power in Mexico is vested in a Supreme Court and in Circuit and District Courts. Under the Constitution (Art. 94) the number and attributes of the Circuit and District Courts are deter-

DEPARTMENT OF FOREIGN AFFAIRS OF THE MEXICAN GOVERNMENT.

DEPARTMENT OF COMMUNICATIONS AND PUBLIC WORKS, MEXICO CITY.

These fine edifices are typical of the numerous public buildings of modern style which have been erected in the Mexican capital during recent years.

lating to the Federal District and the territories (unlike the District of Columbia in the United States the Federal District—city of Mexico—is represented as a state in the Mexican Congress); to impose taxes necessary to provide for the budget; to lay down the basis upon which the Executive may contract loans upon the credit of the nation, to approve the said loans and to recognize and order payment of the national debt; to enact tariff laws, to legislate respecting mining, commerce and credit institutions and to establish a single Bank of Issue; to declare war, to raise and maintain the army and navy of the Federal Union and to regulate their organization and service, to lay down rules for the organization, armament and discipline of the national guard; to enact laws respecting citizenship, naturalization, colonization, emigration and immigration, public health, roads, postal service, coinage, weights and measures, public lands, and to organize the diplomatic and consular services.

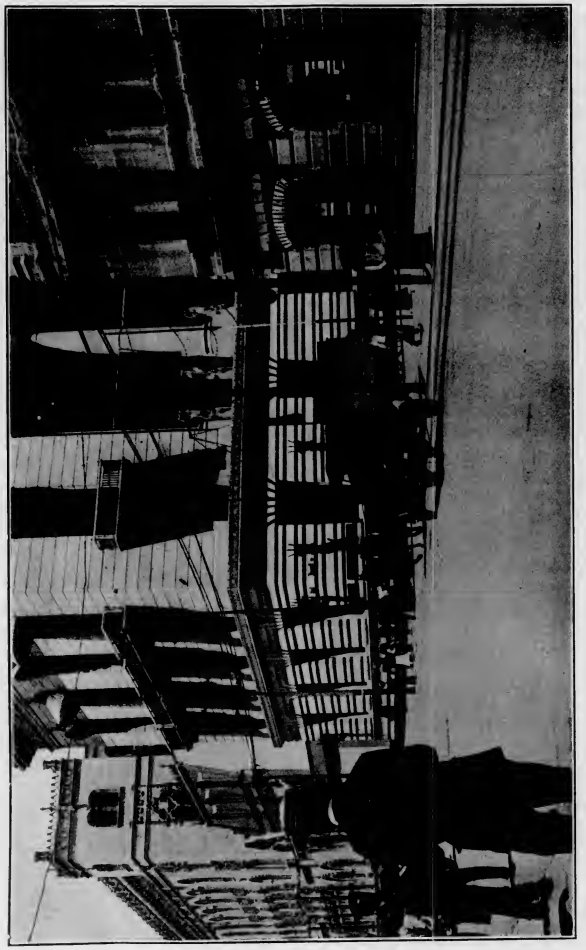
The Chamber of Deputies has exclusive power: To act as a Returning Board in the election of the President; to overlook the Comptroller's Office and to name the chiefs and other employees of that office; to approve the annual budget, and to impeach public officials.

The Senate has exclusive power: To approve treaties and diplomatic conventions with foreign powers; to confirm nominations made by the President of ministers, diplomatic agents, consuls general, higher officials of the Treasury, colonels and other superior officers of the national army and navy; to authorize the sending of national troops outside the limits of the country or the national guard outside its respective state, the passage of foreign troops through national territory or the remaining of foreign fleets for more than one month in Mexican waters; to try impeachments and to provide for the reorganization of any state government wherein the constitutional powers have broken down.

Mexico, in line with several other Latin American countries, has what is known as the Permanent Committee (Art. 78). This Committee composed of 29 members, 14 senators and 15 deputies, chosen just before adjournment, during the recess of Congress performs many of the functions thereof. The Committee also considers pending legislation and prepares reports on such so as to facilitate the business of the next session.

JUDICIAL

The judicial power in Mexico is vested in a Supreme Court and in Circuit and District Courts. Under the Constitution (Art. 94) the number and attributes of the Circuit and District Courts are deter-



CALLE DEL TEATRO, MEXICO CITY.

This is one of the typical modern business streets of the city of Mexico. The city is situated in a valley surrounded by mountains, and its location is such that it is destined to be one of the most beautiful cities in the world. Its superficial area is about 15 square miles, and its population about 800,000. The ancient Aztec metropolis, Tenochtitlan, once occupied the site, and where the great cathedral now stands was located the celebrated teocalli, the great pyramid temple of Aztec architecture that marked the center of the Aztec city. The modern capital of Mexico boasts of its fine suburbs, excellent streets, spacious parks, such as the Alameda, its electric car system, splendid theaters, and all the attributes of a modern cosmopolitan world city.

mined by law. Members of the Supreme Court are denominated Ministers (Ministros); of the Circuit Courts, magistrates (magistrados); and of the District Courts, judges (jueces).

The members of the Supreme Court, eleven in number, are elected by Congress from among candidates proposed by the State legislatures, one candidate from each State.

A member of the Supreme Court must be a Mexican citizen by birth, 35 years of age, graduate in law, of good reputation and have resided in the country for five years prior to his election. Members of the Circuit and District Courts are appointed by the Supreme Court.

Mexican Federal courts have jurisdiction in cases arising under laws or acts of the authorities which may violate individual guarantees; impair or restrain the sovereignty of the States, or in which State law or official action invades the sphere of Federal authority (Art. 103). The Federal courts have jurisdiction also:

I. In cases of a civil or criminal nature arising from the enforcement or application of federal laws or in respect to treaties entered into with foreign powers. However, when such cases affect only private interests the suit may, at the election of the plaintiff, be brought in the State or Territorial courts.

II. In cases arising under admiralty law.

III. In cases to which the Federation may be a party.

IV. In cases between two or more States or between a State and the Federation.

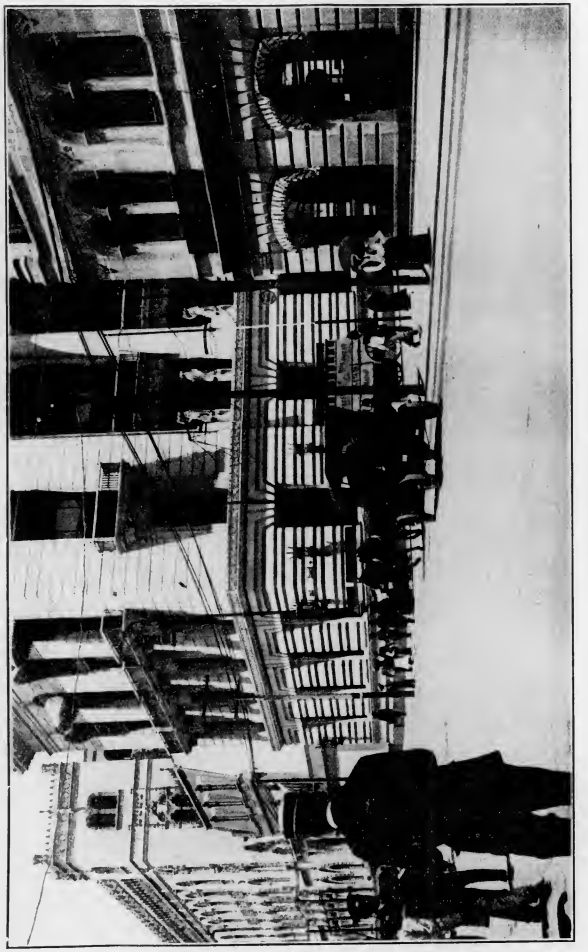
V. In cases between a State and a citizen or citizens of another State.

VI. In cases affecting members of the diplomatic and consular corps.

The Supreme Court resolves conflicts of jurisdiction between Federal courts, or between Federal and State courts, or between courts of one State and those of another. It has exclusive jurisdiction in cases III and IV above and of conflicts within a State respecting the constitutional rights of the several branches of a State government.

ECONOMIC PROVISIONS OF THE CONSTITUTION

A number of the provisions of the new constitution respecting the economic development of the country, the status and rights of aliens and the fundamental basis of property have created a world-wide interest.



CALLE DEL TEATRO, MEXICO CITY.

This is one of the typical modern business streets of the city of Mexico. The city is situated in a valley surrounded by mountains, and its location is such that it is destined to be one of the most beautiful cities in the world. Its superficial area is about 15 square miles, and its population about 800,000. The ancient Aztec metropolis, Tenochtitlan, once occupied the site, and where the great cathedral now stands was located the celebrated teocalli, the great pyramidal structure that marked the center of the Aztec city. The modern capital is a splendid example of the best type of Spanish-American city, with its elegant residences, excellent streets, spacious parks, and its fine, almost European, shops, theaters, and all the attributes of a modern cosmopolitan world city.

mined by law. Members of the Supreme Court are denominated Ministers (Ministros); of the Circuit Courts, magistrates (magistrados); and of the District Courts, judges (jueces).

The members of the Supreme Court, eleven in number, are elected by Congress from among candidates proposed by the State legislatures, one candidate from each State.

A member of the Supreme Court must be a Mexican citizen by birth, 35 years of age, graduate in law, of good reputation and have resided in the country for five years prior to his election. Members of the Circuit and District Courts are appointed by the Supreme Court.

Mexican Federal courts have jurisdiction in cases arising under laws or acts of the authorities which may violate individual guarantees; impair or restrain the sovereignty of the States, or in which State law or official action invades the sphere of Federal authority (Art. 103). The Federal courts have jurisdiction also:

I. In cases of a civil or criminal nature arising from the enforcement or application of federal laws or in respect to treaties entered into with foreign powers. However, when such cases affect only private interests the suit may, at the election of the plaintiff, be brought in the State or Territorial courts.

II. In cases arising under admiralty law.

III. In cases to which the Federation may be a party.

IV. In cases between two or more States or between a State and the Federation.

V. In cases between a State and a citizen or citizens of another State.

VI. In cases affecting members of the diplomatic and consular corps.

The Supreme Court resolves conflicts of jurisdiction between Federal courts, or between Federal and State courts, or between courts of one State and those of another. It has exclusive jurisdiction in cases III and IV above and of conflicts within a State respecting the constitutional rights of the several branches of a State government.

ECONOMIC PROVISIONS OF THE CONSTITUTION

A number of the provisions of the new constitution respecting the economic development of the country, the status and rights of aliens and the fundamental basis of property have created a world-wide interest.

Some of the more salient of these provisions as contained in Art. 27 are herewith given:

> "The property right in lands and waters included within the limits of the national territory belongs originally to the nation which has had and has the right to transmit dominion thereover to private individuals, thereby constituting private property.
>
> "Expropriations may be made only on account of public utility and through indemnification.
>
> "The nation shall have the right at all times to impose on private property such qualifications as may be dictated by the public interest, such as that of regulating the improvement of natural elements susceptible of appropriation in order to make an equitable distribution of the public wealth and to care for its conservation. With this object necessary measures shall be prescribed for dividing up of large rural estates (latifundios); for the development of the small property; for the creation of new centers of agricultural population with the lands and waters which may be indispensable thereto; for the support of agriculture, and for avoiding the destruction of natural resources and the losses that property may suffer in prejudice of society. Villages, settlements and communities lacking lands and waters or which have not sufficient quantities thereof for the necessities of their populations, shall have the right to have the same conferred on them to be taken from the adjoining properties respecting always the small property. Therefore the donations of lands which may have been made up to the present time in conformity with the Decree of January 6, 1915, are confirmed."

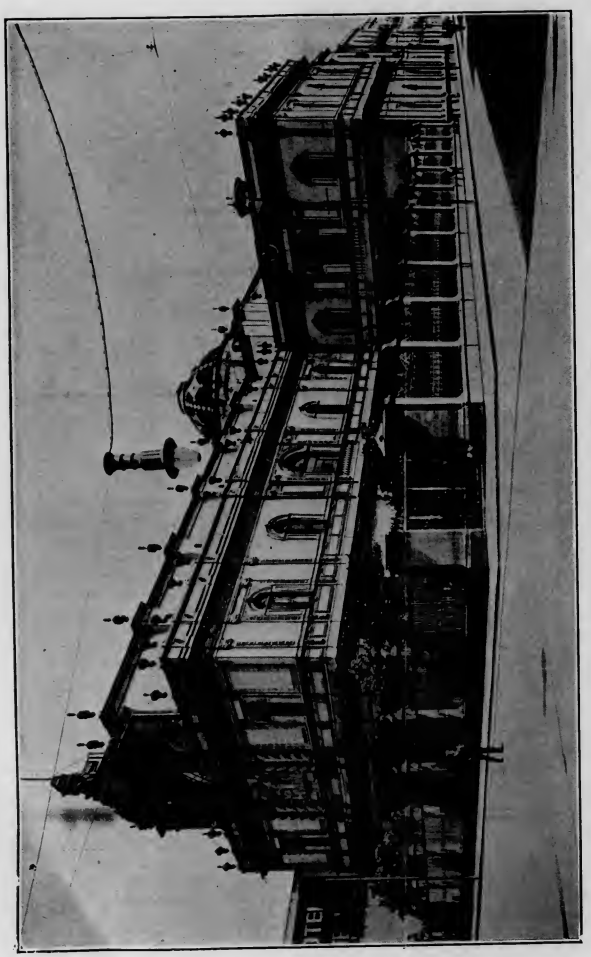
This decree promulgated by President Carranza on January 6, 1915, declared null all alienations of lands, waters and forests belonging to villages, settlements, congregations and communities made by Governors of States or other local authority in contravention of the provisions of the law of June 25, 1856, and other laws and dispositions relative thereto. It also declared void all concessions, compositions or sales of lands, waters and forests made by Ministers of Fomento or of the Treasury or by any other Federal authority since December 1, 1876, in which there has been invaded or illegally occupied the commons, allotment or other lands belonging to villages, settlements, congregations and communities. The decree makes provision of means for the reacquisition of such properties.

> "The acquisition of private property necessary to accomplish the objects above expressed shall be considered as of public utility.

> "To the Nation appertains the direct ownership (dominio directo) of all minerals or substances that in veins, strata, masses or beds constitute deposits whose nature is distinct from the components of the soil, such as minerals from which are extracted metals and metaloids used in the industries; deposits of precious stones, or rock salt and salines formed directly by marine waters; products derived directly from rock decomposition, when their exploitation requires under surface works; phosphates capable of being used as fertilizers; solid mineral combustibles; petroleum and all solid, liquid or gaseous carbides of hydrogen."

This section also confers upon the Nation ownership of the territorial waters within the limit recognized by international law and of lagoons, estuaries, lakes and of the principal rivers and streams.

> "In the cases referred to in the two preceding paragraphs (minerals and waters) the ownership of the Nation is inalienable and incapable of being lost by prescription, and concessions may be made only by the Federal government to private individuals or civil or commercial companies organized conformably to the Mexican law under the condition that regular workings for the exploitation of the elements treated of be established and that the requirements of law be complied with."
>
> "Only Mexicans by birth or by naturalization and Mexican companies have the right to acquire the ownership of lands, waters and their incidents or to obtain concessions for the exploitation of mines, waters or mineral combustibles in the Mexican republic. The State may concede the same rights to foreigners provided that they agree before the Department of Foreign Affairs to consider themselves as national in respect to such property and not to invoke the protection of their governments in connection therewith, under the penalty, in case of failure to comply with the agreement, of forfeiting to the Nation the property which may have been acquired by virtue of the same. On no account shall foreigners acquire direct ownership of lands and waters within a belt of 100 kilometers from the frontiers and of 50 kilometers from the coast."
>
> "Commercial stock companies shall not acquire, hold or administer rural properties. Companies of this kind may be constituted to exploit any manufacturing, mining or petroleum industry or for any other end, not agricultural, may acquire, hold or administer lands solely to the extent that may be strictly necessary for the establishments or services of the purposes indicated, and which the Executive of the Union or of the States shall determine in each case." (Clause IV.)
>
> "Banks duly authorized in conformity to the laws regulating institutions of credit may have capital sums placed



THE NATIONAL LIBRARY, MEXICO CITY.

upon urban and rural properties in accordance with the provisions of said laws but they can not hold in proprietorship or in administration more real estate than is fully necessary for their direct purposes." (Clause V.)

"Communes, settlements, villages, congregations, tribes and other population corporations which in fact or by law conserve their communal state, shall have capacity to enjoy, in common lands, woods and waters which belong to them or which have been or may be restored to them in accordance with the law of January 6, 1915 (see page 14), until the law determines the manner of making the allotment exclusively of the lands." (Clause VI.)

. "Excepting corporations referred to in Clauses III (charitable institutions), IV, V, and VI (above), no other civil corporation shall hold in property right or administer for itself, real estate or capital placed thereon with the sole exception of buildings intended for the immediate and direct purposes of the institution. The States, the Federal District and the Territories as well as the municipalities throughout the republic shall have full capacity to acquire and hold all real estate necessary for the public services."

"All contracts and concessions made by former governments since the year 1876 that as a consequence have brought about the monopoly of lands, waters or the natural wealth of the Nation by a single person or company, are declared revisable and the Executive of the Union is empowered to declare the same null when they involve grave prejudice to the public interest."

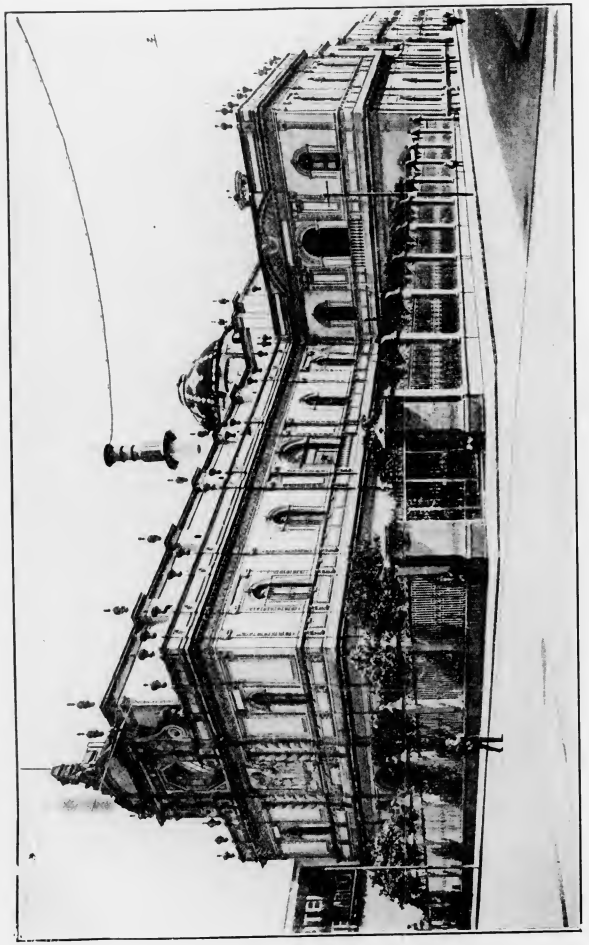
Under Art. 33 the President "shall have the exclusive authority to compel any foreigner whose sojourn he may deem inconvenient, to leave the national territory immediately and without the necessity of judicial process."

Art. 14.—No law shall be given retroactive effect to the prejudice of any person whatsoever.

No person shall be deprived of life, liberty, property, possessions or rights without due process of law instituted before a duly created court, in which the essential elements of procedure are observed and in accordance with previously existing laws.

In criminal cases no penalty shall be imposed by mere analogy or even by a priori evidence, but the penalty shall be decreed by a law in every respect applicable to the crime in question.

In civil suits the final judgment shall be according to the letter or the juridical interpretation of the law; in the absence of the latter, the general legal principles shall govern.



THE NATIONAL LIBRARY, MEXICO CITY.

upon urban and rural properties in accordance with the provisions of said laws but they can not hold in proprietorship or in administration more real estate than is fully necessary for their direct purposes." (Clause V.)

"Communes, settlements, villages, congregations, tribes and other population corporations which in fact or by law conserve their communal state, shall have capacity to enjoy, in common lands, woods and waters which belong to them or which have been or may be restored to them in accordance with the law of January 6, 1915 (see page 14), until the law determines the manner of making the allotment exclusively of the lands." (Clause VI.)

"Excepting corporations referred to in Clauses III (charitable institutions), IV, V, and VI (above), no other civil corporation shall hold in property right or administer for itself, real estate or capital placed thereon with the sole exception of buildings intended for the immediate and direct purposes of the institution. The States, the Federal District and the Territories as well as the municipalities throughout the republic shall have full capacity to acquire and hold all real estate necessary for the public services."

"All contracts and concessions made by former governments since the year 1876 that as a consequence have brought about the monopoly of lands, waters or the natural wealth of the Nation by a single person or company, are declared revisable and the Executive of the Union is empowered to declare the same null when they involve grave prejudice to the public interest."

Under Art. 33 the President "shall have the exclusive authority to compel any foreigner whose sojourn he may deem inconvenient, to leave the national territory immediately and without the necessity of judicial process."

Art. 14.—No law shall be given retroactive effect to the prejudice of any person whatsoever.

No person shall be deprived of life, liberty, property, possessions or rights without due process of law instituted before a duly created court, in which the essential elements of procedure are observed and in accordance with previously existing laws.

In criminal cases no penalty shall be imposed by mere analogy or even by a priori evidence, but the penalty shall be decreed by a law in every respect applicable to the crime in question.

In civil suits the final judgment shall be according to the letter or the juridical interpretation of the law; in the absence of the latter, the general legal principles shall govern.

The States

There are 28 States, the Federal District and 2 Territories. Their areas and populations according to the census of 1910 and as estimated in 1921 are as follows:

States.	Square miles.	Census, 1910.	Estimated, 1921.
Aguascalientes	2,969	118,978	125,000
Campeche	18,086	85,795	90,000
Chiapas	27,222	436,817	560,000
Chihuahua	89,974	405,265	500,000
Coahuila	63,728	367,652	400,000
Colima	2,172	77,704	80,000
Durango	42,265	436,147	500,000
Guanajuato	10,948	1,075,270	1,100,000
Guerrero	24,995	605,437	750,000
Hidalgo	8,575	641,895	750,000
Jalisco	33,496	1,202,802	1,280,000
Mexico	8,849	975,019	1,100,000
Michoacan	22,656	991,649	1,050,000
Morelos	2,733	179,814	210,000
Nayarit	10,951	171,837	200,000
Nuevo Leon	23,678	368,929	420,000
Oaxaca	35,382	1,041,035	1,100,000
Puebla	12,203	1,092,456	1,100,000
Querétaro	4,492	243,515	260,000
San Luis Potosí	25,323	624,748	700,000
Sinaloa	27,552	323,499	400,000
Sonora	76,619	262,545	350,000
Tabasco	10,072	183,708	210,000
Tamaulipas	31,758	249,253	400,000
Tlaxcala	1,594	183,805	210,000
Veracruz	29,283	1,124,368	1,400,000
Yucatan	15,939	327,911	390,000
Zacatecas	24,457	475,863	500,000
Lower California, Territory	58,328	52,244	60,000
Quintana Roo, Territory	19,264	9,109	10,000
Federal District	578	719,052	800,000

Mexico has a coast line of 1,400 miles along the Mexican Gulf, 327 miles on the Caribbean Sea and no less than 4,574 miles on the Pacific Ocean, including the Gulf of California between the peninsula of Lower California and the mainland, measuring indentations.

On the Gulf of Mexico the chief ports are, Matamoros, Tampico, Tuxpan, Veracruz, Puerto Mexico (Coatzacoalcos), Frontera, Campeche and Progreso. On the Caribbean Sea, Ascension and Espiritu Santo.

On the Pacific they are Guaymas, Topolobampo, Altata, Mazatlan, San Blas, Manzanillo, Acapulco, Puerto Angeles, Salina Cruz, Tonalá, and San Benito, on the mainland, and Enseñada and La Paz on the peninsula of Lower California.

The Atlantic States, bordering on the Gulf of Mexico, are Tamau-

SECTION OF THE MINING TOWN OF EL ORO, STATE OF MEXICO.

Real del Oro, or better known as simply El Oro, is one of the richest mining camps in the Republic. Its altitude is 9,200 feet, and is picturesquely located in a pocket of the hills. Its rich mines were discovered by the Spaniards late in the eighteenth century, and today its output of gold is perhaps greater than that of any similar district in Mexico.

The States

There are 28 States, the Federal District and 2 Territories. Their areas and populations according to the census of 1910 and as estimated in 1921 are as follows:

States.	Square miles.	Census, 1910.	Estimated, 1921.
Aguascalientes	2,969	118,978	125,000
Campeche	18,086	85,795	90,000
Chiapas	27,222	436,817	560,000
Chihuahua	89,974	405,265	500,000
Coahuila	63,728	367,652	400,000
Colima	2,172	77,704	80,000
Durango	42,265	436,147	500,000
Guanajuato	10,948	1,075,270	1,100,000
Guerrero	24,995	605,437	750,000
Hidalgo	8,575	641,895	750,000
Jalisco	33,496	1,202,802	1,280,000
Mexico	8,849	975,019	1,100,000
Michoacan	22,656	991,649	1,050,000
Morelos	2,733	179,814	210,000
Nayarit	10,951	171,837	200,000
Nuevo Leon	23,678	368,929	420,000
Oaxaca	35,382	1,041,035	1,100,000
Puebla	12,203	1,092,456	1,100,000
Querétaro	4,492	243,515	260,000
San Luis Potosi	25,323	624,748	700,000
Sinaloa	27,552	323,499	400,000
Sonora	76,619	262,545	350,000
Tabasco	10,072	183,708	210,000
Tamaulipas	31,758	249,253	400,000
Tlaxcala	1,594	183,805	210,000
Veracruz	29,283	1,124,368	1,400,000
Yucatan	15,939	327,911	390,000
Zacatecas	24,457	475,863	500,000
Lower California, Territory	58,328	52,244	60,000
Quintana Roo, Territory	19,264	9,109	10,000
Federal District	578	719,052	800,000

Mexico has a coast line of 1,400 miles along the Mexican Gulf, 327 miles on the Caribbean Sea and no less than 4,574 miles on the Pacific Ocean, including the Gulf of California between the peninsula of Lower California and the mainland, measuring indentations.

On the Gulf of Mexico the chief ports are, Matamoros, Tampico, Tuxpan, Veracruz, Puerto Mexico (Coatzacoalcos), Frontera, Campeche and Progreso. On the Caribbean Sea, Ascension and Espiritu Santo.

On the Pacific they are Guaymas, Topolobampo, Altata, Mazatlan, San Blas, Manzanillo, Acapulco, Puerto Angeles, Salina Cruz, Tonalá, and San Benito, on the mainland, and Enseñada and La Paz on the peninsula of Lower California.

The Atlantic States, bordering on the Gulf of Mexico, are Tamau-

SECTION OF THE MINING TOWN OF EL ORO, STATE OF MEXICO.

Real del Oro, or better known as simply El Oro, is one of the richest mining camps in the Republic. Its altitude is 9,200 feet, and is picturesquely located in a pocket of the hills. Its rich mines were discovered by the Spaniards late in the eighteenth century, and today its output of gold is perhaps greater than that of any similar district in Mexico.

lipas, Vera Cruz, Tabasco, Campeche, Yucatán and the territory of Quintana Roo on the Caribbean Sea.

The States bordering on the Pacific are Sonora (on the Gulf of California), Sinaloa, Nayarit, Jalisco, Colima, Michoacan, Guerrero, Oaxaca, Chiapas and the territory of Lower California.

Sonora, Chihauhua, Coahuila, Nuevo Leon and Tamaulipas border on the United States; Chiapas, Tabasco, Campeche and the territory of Quintana Roo on the republic of Central America. Aguascalientes, Durango, Guanajuato, Hidalgo, Morelos, Mexico, Puebla, Querétaro, Tlaxcala, San Luis Potosí, Zacatecas and the Federal District are interior.

The Atlantic Coast

Veracruz, 36,000 inhabitants, has a harbor of recent construction, with breakwaters to the north, northeast and southeast and an area of 543 acres. The entrance to the harbor, between the extremities of the two breakwaters, has a width of 285 yeards in the channel. Lights are located on both sides of the entrance. The depth of water is 33 feet. There are 5 wharves, three of which are government property.

The city of Veracruz was one of the first places settled by the Spaniards and possesses much that is of historic interest. Here they had their base of supplies while they besieged the Aztec capital, and later from here started their famous silver fleets for Spain.

About one mile from the mainland, on Gallega island, stands the celebrated fortress of San Juan de Ulua, with an arsenal, dry-dock, shipyard and the Veracruz marine signal station. It is said that the corner-stone of the castle, laid in 1528, is on the spot where Juan de Grijalva, the forerunner of Cortés, landed in 1518. Veracruz was repeatedly sacked by the buccaneers and bombarded by foreign fleets.

Veracruz is the terminus of two railroads connecting it with Mexico City: the Mexican railway (standard gauge), and the narrow-gauge Interoceanic railroad which belongs to the Government.

The Railway from Veracruz

The beginning of the Mexican railway connecting Veracruz with Mexico City was in 1854, when a line 10 miles long was constructed on the Atlantic side between Veracruz and Tejeria and about the same time a section 2½ miles long was built to connect the city of Mexico with the celebrated sanctuary, Guadalupe.

The total length of the Mexican railway is 340 miles. The trains over the 265 miles (425 kilometers) between Veracruz and the capital make the trip in 12 hours. The line is a marvel of engineering, the trip being one of the most picturesque in the world. At Paso del

Macho (Mule Pass), 48 miles (77 kilometers), the train has climbed to 1,500 feet, and just beyond it crosses three bridges, the San Alejo, 318 feet long; the Chiquihuite, 220 feet long, and the Atoyac, near the falls of the river of that name. A few miles beyond, the ascent becomes steep with sharp 4 per cent grades. Here the tropical scenery changes from giant trees and orchids to bananas, coffee and sugar cane. Tunnels are numerous.

Córdoba, 10,000 inhabitants, 66 miles (107 kilometers), is the center of a rich coffee district. It is a picturesque town, founded in 1618. Here the real attractions of the scenery begin. The view is grand and at the Metlac Barranca is one of the most dangerous points of the line. Here are five tunnels. The train glides across the Metlac bridge, considered a marvelous piece of engineering, 350 feet long, built on a curve of 325 feet radius, on a 3 per cent grade, 92 feet above the river. It is supported by eight wrought-iron pillars on masonry bases. The horseshoe effect of a long train crossing it is striking.

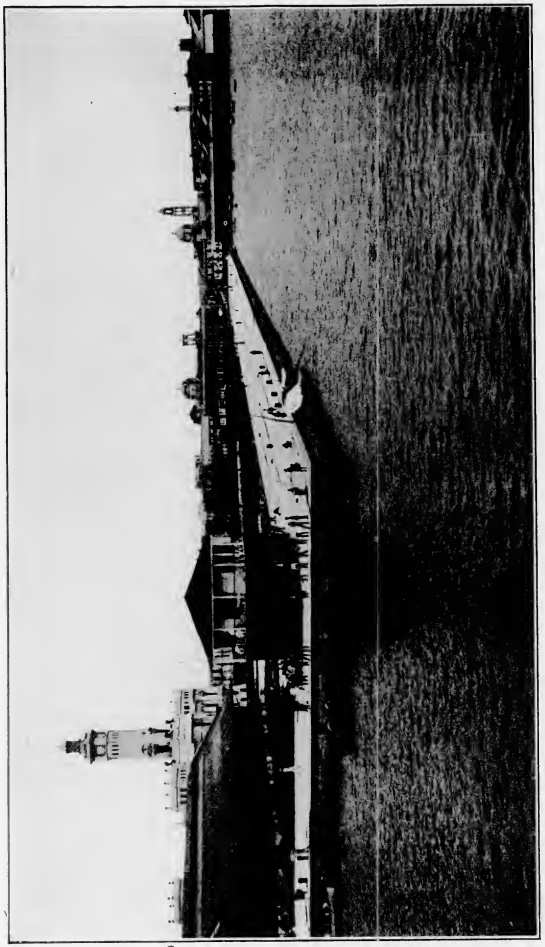
At Orizaba, 48,000 inhabitants, 83 miles (133 kilometers), the train reaches an altitude of 4,028 feet. The town is the site of a prehistoric settlement conquered by the Aztecs 60 years before the advent of the Spaniards. Orizaba is midway between the "hot country" and the plateau and is a favorite resort. Orizaba is known for its huge cotton mills, among the largest in Mexico.

Just beyond the train enters a ravine, called El Infiernillo (the little hell) and crosses dizzy heights, passing through many tunnels and over many bridges. Bananas and coffee have disappeared and tropical scenery lies behind. The grades are heavy. Maltrata, 96 miles (154 kilometers), is reached at an altitude of 5,544 feet. Beyond Alta Luz is one of the most dangerous points on the line, Winner's Bridge, 90 feet, spanning a chasm. Three thousand feet below are seen the red-tiled roofs of Maltrata village.

Boca del Monte, 108 miles (174 kilometers), on the eastern edge of the Mexican plateau, is 7,849 feet above the sea, a climb of 1½ miles from Veracruz. The snow-capped Orizaba is seen in all its grandeur at Esperanza.

At San Marcos, 151 miles (243 kilometers), is the junction of the Interoceanic Railway. Further on, at Apizaco, 178 miles (285 kilometers), is the junction of the branch line to Puebla, the third largest city of the republic.

The highest point of the line is 8,333 feet above the sea and 986 feet higher than Mexico City. From here the train slopes to the Valley of Mexico, through the pulque district, 77 miles (124 kilometers).



THE PRINCIPAL WHARF OF VERACRUZ.

At Otumba, 35 miles (56 kilometers), from Mexico City, is passed the locality where Cortés, driven with his army from the Aztec capital, fought one of the fiercest battles of the Conquest. Further on, there are the two pyramids of the Sun and Moon, near San Juan Teotihuacan, counted among the most remarkable pre-Columbian monuments of Mexico. Soon the spires of Guadalupe shrine are seen and then the train pulls into Mexico City.

The Interoceanic Railway is the result of a concession given in 1878 to build a road via the City of Mexico to connect Veracruz on the Gulf of Mexico and Acapulco on the Pacific Ocean. The main line (narrow gauge) extends 293 miles (471 kilometers) from Veracruz to Mexico City, through Jalapa, with an important branch to the City of Puebla. It has branches in the States of Morelos and Puebla, and also controls the Mexican Eastern and Mexican Southern railways.

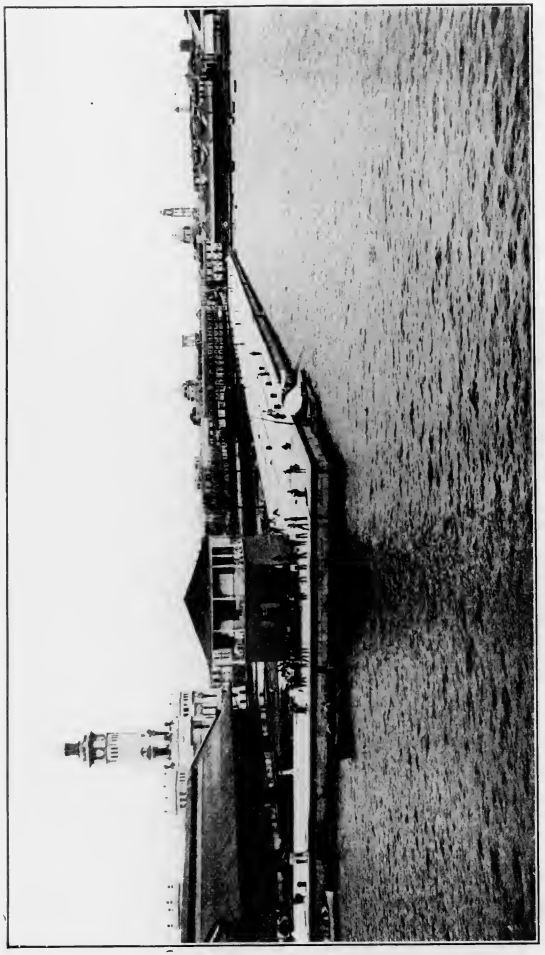
Jalapa, 81 miles (131 kilometers) from Veracruz, once the capital of the State of Veracruz (Cordoba being the present capital), is the principal town on this line. It has 28,000 inhabitants and is of ancient Indian origin. Cortés passed through it with his band on their memorable march upon the Aztec capital, after the destruction of the Spanish ships in Veracruz Bay. Jalapa is one of the most picturesque towns in Mexico. It is a coffee and tobacco center.

The through train from Mexico City to Veracruz makes the journey in 13 hours. Fine views of the "sentinels of Mexico," the snow-capped giants—Popocatepetl, Ixtaccihuatl and Malintzi—are obtained at several points on this trip.

Tampico, about midway between the United States frontier at Matamoros and Veracruz, 602 miles (970 kilometers), by railway from Mexico City, in the State of Tamaulipas, is one of the most important ports of Mexico. Situated six miles from the mouth of the Pánuco River, it possesses several fine public buildings, a chamber of commerce and is modern in every way. Steamers lie at the wharf at Tampico. There are five wharves in use. The National Railroad Company has the obligation to keep the jetty works in good condition, with a minimum depth at high tide on the channel of 33 feet (10 meters).

Commencing at the jetties on both sides of the river are located the various loading wharves and the plants of the principal petroleum companies.

Tampico is the terminus of two branches of the National Railways, one leading to Monterey and thence to the border towns of Laredo, Brownsville and Eagle Pass; the other, the San Luis Potosí section.



THE PRINCIPAL WHARF OF VERACRUZ.

At Otumba, 35 miles (56 kilometers), from Mexico City, is passed the locality where Cortés, driven with his army from the Aztec capital, fought one of the fiercest battles of the Conquest. Further on, there are the two pyramids of the Sun and Moon, near San Juan Teotihuacan, counted among the most remarkable pre-Columbian monuments of Mexico. Soon the spires of Guadalupe shrine are seen and then the train pulls into Mexico City.

The Interoceanic Railway is the result of a concession given in 1878 to build a road via the City of Mexico to connect Veracruz on the Gulf of Mexico and Acapulco on the Pacific Ocean. The main line (narrow gauge) extends 293 miles (471 kilometers) from Veracruz to Mexico City, through Jalapa, with an important branch to the City of Puebla. It has branches in the States of Morelos and Puebla, and also controls the Mexican Eastern and Mexican Southern railways.

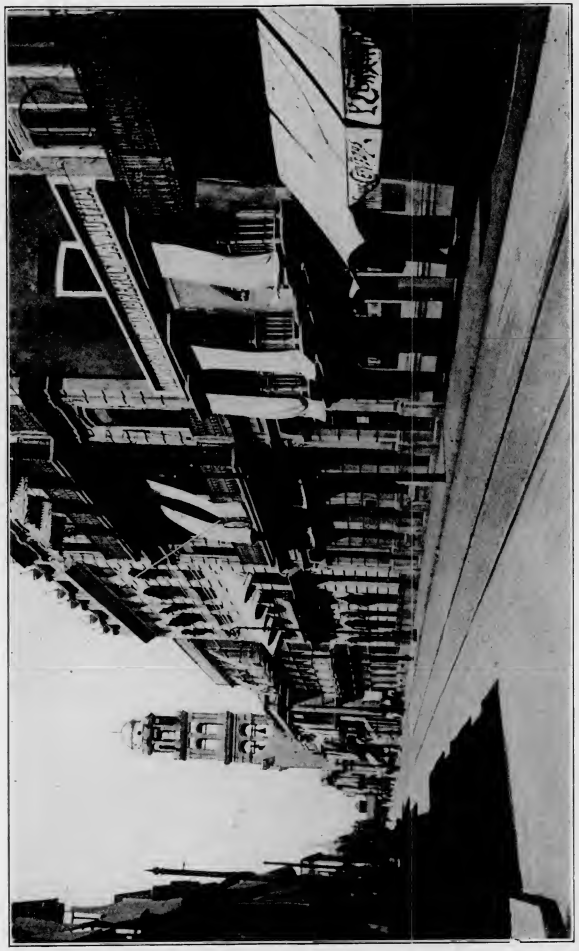
Jalapa, 81 miles (131 kilometers) from Veracruz, once the capital of the State of Veracruz (Cordoba being the present capital), is the principal town on this line. It has 28,000 inhabitants and is of ancient Indian origin. Cortés passed through it with his band on their memorable march upon the Aztec capital, after the destruction of the Spanish ships in Veracruz Bay. Jalapa is one of the most picturesque towns in Mexico. It is a coffee and tobacco center.

The through train from Mexico City to Veracruz makes the journey in 13 hours. Fine views of the "sentinels of Mexico," the snow-capped giants—Popocatepetl, Ixtaccihuatl and Malintzi—are obtained at several points on this trip.

Tampico, about midway between the United States frontier at Matamoros and Veracruz, 602 miles (970 kilometers), by railway from Mexico City, in the State of Tamaulipas, is one of the most important ports of Mexico. Situated six miles from the mouth of the Pánuco River, it possesses several fine public buildings, a chamber of commerce and is modern in every way. Steamers lie at the wharf at Tampico. There are five wharves in use. The National Railroad Company has the obligation to keep the jetty works in good condition, with a minimum depth at high tide on the channel of 33 feet (10 meters).

Commencing at the jetties on both sides of the river are located the various loading wharves and the plants of the principal petroleum companies.

Tampico is the terminus of two branches of the National Railways, one leading to Monterey and thence to the border towns of Laredo, Brownsville and Eagle Pass; the other, the San Luis Potosí section,



INDEPENDENCE AVENUE, VERACRUZ.

The streets of Veracruz are straight and paved with asphalt throughout a wide area. Independence Avenue is one of the most beautiful streets of the city and the principal business thoroughfare.

crosses a rich, tropical region lying immediately west of Tampico, and thence up a steep mountain grade to the elevated central plateau.

The Pánuco River is navigable between its head and Tampico and serves the Pánuco and Topila oil fields.

Tuxpan is situated five miles west of the Gulf of Mexico, on the Tuxpan River. The river is navigable for about 18 miles west of the town. Tuxpan is the terminus of several pipe-lines; the oil is pumped through submarine lines and received into the ships through flexible hose attached to the end of the lines.

The distance by train from Tampico to Monterey is 322 miles (518 kilometers), a trip of 14 hours. On the line is Victoria, the capital of the State of Tamaulipas, with a population of 12,000.

Monterey, the capital of the State of Nuevo Leon, 1,500 feet above the sea, has a population of 85,000. There is a large American colony. It is sometimes called the Chicago of Mexico. There is excellent sewerage and water system, electric trolley and light service, with new public buildings, banks and thoroughly equipped smelters. In addition, there are breweries, ice factories, flour mills and other manufacturing plants. The city is a great railroad center, and it is said that its tonnage is second only to that of Mexico City.

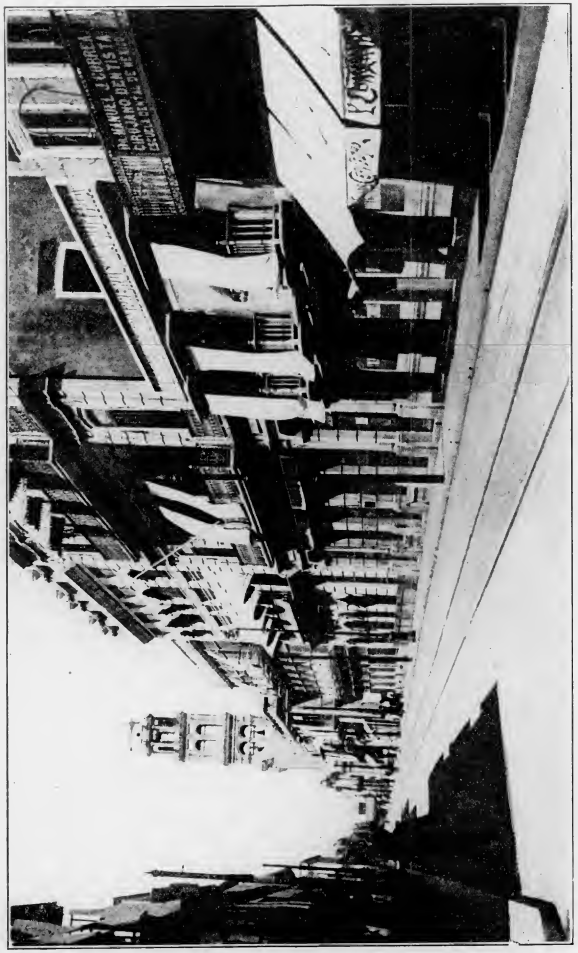
The National Railways of Mexico cross the State from Nuevo Laredo on the way to the City of Mexico. Besides the line to Tampico, it is connected with the Gulf by way of Matamoros, opposite Brownsville, in Texas, at the mouth of the Rio Grande, with Eagle Pass by the Mexican International; with Torreon and Durango by the same railway, and with Torreon and Chihuahua by the Mexican Central.

From Tampico to San Luis Potosí, a distance of 282 miles (454 kilometers), the line traverses very picturesque country, rising to an altitude of 6,290 feet. The grades are very heavy.

San Luis Potosí, 70,000 inhabitants, is the capital and chief city of the State of the same name, and lies 327 miles (526 kilometers) from Mexico City. The city has tanneries, a flour mill, a nail factory, linen mill, a cold-storage plant, tramcars, telephones, electric lights, banks and is the center of an important mining district. Situated equidistant from the Gulf of Mexico and the Pacific Ocean, it has always been a great distributing point for the north-central portion of Mexico. The city contains many large and handsome public and private buildings.

Northern Mexico

Saltillo, the capital of the State of Coahuila, is now a modern city, with good drainage and water supply, banks, hotels, clubs, theaters



INDEPENDENCE AVENUE, VERACRUZ.

The streets of Veracruz are straight and paved with asphalt throughout a wide area. Independence Avenue is one of the most beautiful streets of the city and the principal business thoroughfare.

crosses a rich, tropical region lying immediately west of Tampico, and thence up a steep mountain grade to the elevated central plateau.

The Pánuco River is navigable between its head and Tampico and serves the Pánuco and Topila oil fields.

Tuxpan is situated five miles west of the Gulf of Mexico, on the Tuxpan River. The river is navigable for about 18 miles west of the town. Tuxpan is the terminus of several pipe-lines; the oil is pumped through submarine lines and received into the ships through flexible hose attached to the end of the lines.

The distance by train from Tampico to Monterey is 322 miles (518 kilometers), a trip of 14 hours. On the line is Victoria, the capital of the State of Tamaulipas, with a population of 12,000.

Monterey, the capital of the State of Nuevo Leon, 1,500 feet above the sea, has a population of 85,000. There is a large American colony. It is sometimes called the Chicago of Mexico. There is excellent sewerage and water system, electric trolley and light service, with new public buildings, banks and thoroughly equipped smelters. In addition, there are breweries, ice factories, flour mills and other manufacturing plants. The city is a great railroad center, and it is said that its tonnage is second only to that of Mexico City.

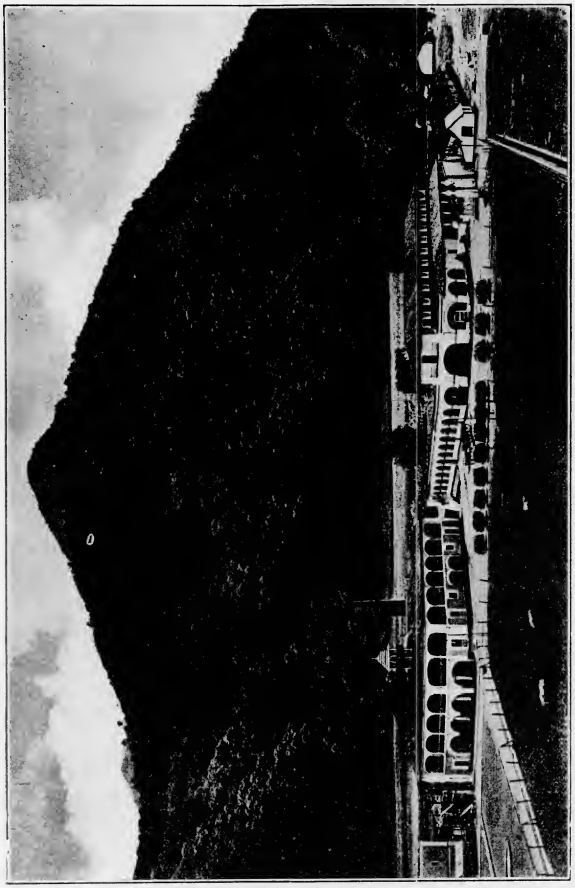
The National Railways of Mexico cross the State from Nuevo Laredo on the way to the City of Mexico. Besides the line to Tampico, it is connected with the Gulf by way of Matamoros, opposite Brownsville, in Texas, at the mouth of the Rio Grande, with Eagle Pass by the Mexican International; with Torreon and Durango by the same railway, and with Torreon and Chihuahua by the Mexican Central.

From Tampico to San Luis Potosí, a distance of 282 miles (454 kilometers), the line traverses very picturesque country, rising to an altitude of 6,290 feet. The grades are very heavy.

San Luis Potosí, 70,000 inhabitants, is the capital and chief city of the State of the same name, and lies 327 miles (526 kilometers) from Mexico City. The city has tanneries, a flour mill, a nail factory, linen mill, a cold-storage plant, tramcars, telephones, electric lights, banks and is the center of an important mining district. Situated equidistant from the Gulf of Mexico and the Pacific Ocean, it has always been a great distributing point for the north-central portion of Mexico. The city contains many large and handsome public and private buildings.

Northern Mexico

Saltillo, the capital of the State of Coahuila, is now a modern city, with good drainage and water supply, banks, hotels, clubs, theaters



A COFFEE AND SUGAR ESTATE NEAR ORIZABA, STATE OF VERACRUZ.

The agricultural products of the State of Veracruz, from the standpoint of value, outrank those of any other State in Mexico. It is especially noted for its production of coffee, sugar cane, and tobacco. It produces more coffee than does any other State; it is a large producer of sugar cane and its refining plants furnish large quantities of a good grade of sugar; its tobacco is the finest grown in the Republic and rivals the Cuban product in flavor and general excellence. From the coast up to an altitude reaching to the *tierra templada* excellent conditions for fruit culture prevail and considerable quantities are grown, although no systematic efforts have been made to develop the industry. Cereals can be cultivated in practically all parts of the State.

and public buildings. It is a manufacturing center, with cotton and ixtle mills. Its population is 35,000.

Torreon, in the southwestern extremity of Coahuila, on the border of the State of Durango, has a population of 45,000 and is the chief town of the Laguna district, from which much of the cotton and grain supply of the country is obtained. It is an important commercial place as the junction of the two great railway lines of the north, the Central and the International. There is electric car service to neighboring towns. Torreon contains smelters, soap factories, rubber works, packing houses, machine shops and flour mills.

Ninety-six miles (167 kilometers) southwest of Torreon, on the International Railway, is Durango, the capital and principal city of the State of the same name. It has a population of 35,000 and many fine buildings, notably the Cathedral, considered one of the finest in the republic. Banks, clubs, tramcars, telegraphs, telephones and electric lights make it a modern city. The famous iron mountain, Cerro del Mercado, is near the city.

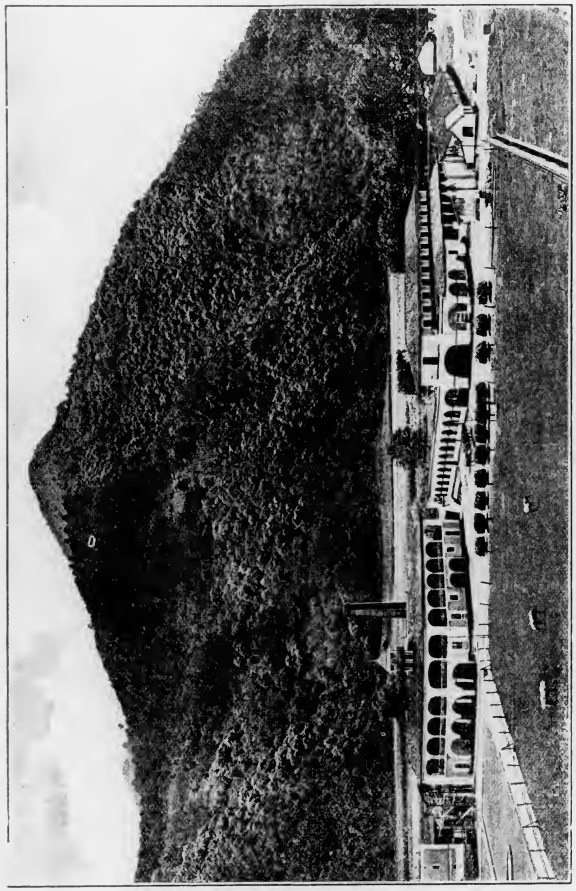
Going north from Torreon on the Mexican Central one reaches Chihuahua City, capital and chief city of the State of the same name. Its population is 40,000. It is a progressive city with several smelters, an iron foundry and minor industries. Although founded in 1539, it is thoroughly modern, with tramcars, banks, hotels and theaters.

Ciudad Juarez, 10,000 inhabitants, 225 miles (410 kilometers) north of Chihuahua, is opposite El Paso, in Texas, and is one of the principal ports of entry of Mexico.

Central Mexico

South of Torreon, on the Mexican Central, is Zacatecas, capital and chief city of the State of the same name. It is situated 439 miles (707 kilometers) north of Mexico City and has a population of 26,000. The city is rich in historical incidents, and in the neighborhood are some prehistoric ruins. It is equipped with many modern conveniences, fine public buildings, a mint, a large library and numerous churches, including the cathedral.

Aguascalientes, 364 miles (586 kilometers) north of the City of Mexico, has a population of 50,000 and is the capital and chief city of the State of the same name. It is celebrated for its fine thermal springs and delicious fruits. It has electric tramcars, telephones, good schools, hospitals and libraries, and among its industries are cotton mills, tobacco factories, pottery works and tanneries. It is connected with San Luis Potosí and Tampico by a branch line. The shops of the National Railways are located here.



A COFFEE AND SUGAR ESTATE NEAR ORIZABA, STATE OF VERACRUZ.

The agricultural products of the State of Veracruz, from the standpoint of value, outrank those of any other State in Mexico. It is especially noted for its production of coffee, sugar cane and tobacco. It produces more coffee than does any other State; it is a large producer of sugar cane and its refining plants furnish large quantities of a good grade of sugar; its tobacco is the finest grown in the Republic and rivals the Cuban product in flavor and general excellence. From the coast up to an altitude reaching to the *tierra templada* excellent conditions for fruit culture prevail and considerable quantities are grown, although no scientific efforts have been made to develop the industry. Cereals can be cultivated in practically all parts of the State.

and public buildings. It is a manufacturing center, with cotton and ixtle mills. Its population is 35,000.

Torreon, in the southwestern extremity of Coahuila, on the border of the State of Durango, has a population of 45,000 and is the chief town of the Laguna district, from which much of the cotton and grain supply of the country is obtained. It is an important commercial place as the junction of the two great railway lines of the north, the Central and the International. There is electric car service to neighboring towns. Torreon contains smelters, soap factories, rubber works, packing houses, machine shops and flour mills.

Ninety-six miles (167 kilometers) southwest of Torreon, on the International Railway, is Durango, the capital and principal city of the State of the same name. It has a population of 35,000 and many fine buildings, notably the Cathedral, considered one of the finest in the republic. Banks, clubs, tramcars, telegraphs, telephones and electric lights make it a modern city. The famous iron mountain, Cerro del Mercado, is near the city.

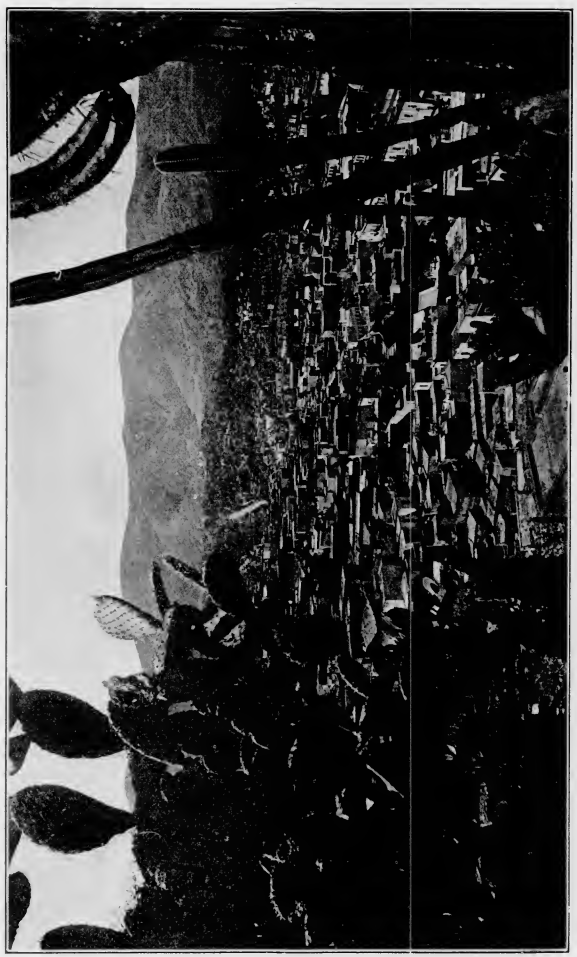
Going north from Torreon on the Mexican Central one reaches Chihuahua City, capital and chief city of the State of the same name. Its population is 40,000. It is a progressive city with several smelters, an iron foundry and minor industries. Although founded in 1539, it is thoroughly modern, with tramcars, banks, hotels and theaters.

Ciudad Juarez, 10,000 inhabitants, 225 miles (410 kilometers) north of Chihuahua, is opposite El Paso, in Texas, and is one of the principal ports of entry of Mexico.

Central Mexico

South of Torreon, on the Mexican Central, is Zacatecas, capital and chief city of the State of the same name. It is situated 439 miles (707 kilometers) north of Mexico City and has a population of 26,000. The city is rich in historical incidents, and in the neighborhood are some prehistoric ruins. It is equipped with many modern conveniences, fine public buildings, a mint, a large library and numerous churches, including the cathedral.

Aguascalientes, 364 miles (586 kilometers) north of the City of Mexico, has a population of 50,000 and is the capital and chief city of the State of the same name. It is celebrated for its fine thermal springs and delicious fruits. It has electric tramcars, telephones, good schools, hospitals and libraries, and among its industries are cotton mills, tobacco factories, pottery works and tanneries. It is connected with San Luis Potosí and Tampico by a branch line. The shops of the National Railways are located here.



VIEW OF GUANAJUATO, MEXICO.

The city of Guanajuato, which is the capital of the State of the same name, has a population of 80,000 inhabitants. It is built on the slopes of a mountain range, and is remarkable for the large number of beautiful private residences. These are conspicuous, not alone for their architecture, but for the superb gardens which front and sometimes entirely surround them. Guanajuato is celebrated as one of the famous silver-producing regions of Mexico, and it is this industry which has been the foundation of the prosperity and development of the city.

Guanajuato, on a branch line of the Mexican Central, is 252 miles (406 kilometers) north of the City of Mexico. It is the capital and chief city of the State of the same name, has 40,000 inhabitants, and is one of the wealthiest, oldest and most picturesque mining towns in the republic. The center of one of the richest mineral areas in the world, producing gold, silver, iron, tin, lead, copper, mercury, bismuth, hematite and sulphur, it is also very interesting through its many historical structures and places. Dolores Hidalgo, the residence of the parish priest of Hidalgo who raised the cry for independence in 1810, is a small town north of the capital. Guanajuato has electric light, tramcars and works constructed to control the waters of the river of the same name and to furnish drinking water to the city.

A few miles southeast is Irapuato, whence a branch runs west to Guadalajara, and from there via Colima to Manzanillo on the Pacific Ocean. A little to the east of Irapuato the two railroad lines connecting Mexico City with the United States join at Celaya and from there run, closely paralleling each other, to the City of Mexico.

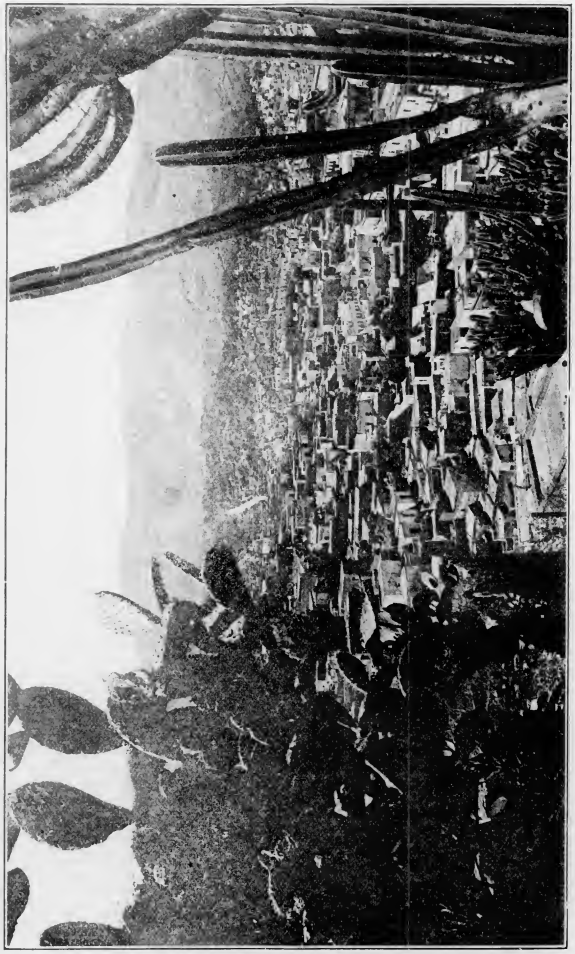
The most important city before reaching the capital is Querétaro, the capital and chief city of the State of the same name, 167 miles (269 kilometers) north of Mexico City, with a population of 35,000. Here the plans for national independence were formed, here the Emperor Maximilian was shot, June 19, 1867, and from here in February, 1917, President Carranza promulgated the new Constitution. There are tramcars, banks, telephones and telegraphic communication with all the republic, and fine public buildings. Hercules, a short distance to the east of Querétaro, is noted as being the location of one of the largest textile mills in the country, with model workmen's homes.

Western Mexico

Guadalajara, 130,000 inhabitants, the capital and principal city of the State of Jalisco, is 381 miles (613 kilometers) from the City of Mexico. It is the second largest city in the republic, and contains fine public buildings, a large cathedral, a large theater, banks, a chamber of commerce, trolleys and electric lights and power, and in many ways is modern and progressive.

By the Colima-Manzanillo extension the Pacific Ocean is reached at the port of Manzanillo. The distance is 223 miles (359 kilometers) from Guadalajara.

Colima, 25,000 inhabitants, the capital and principal city of the State of the same name, on the banks of the Colima, 569 miles (915 kilometers) from the City of Mexico, is an old and picturesque town



VIEW OF GUANAJUATO, MEXICO.

The city of Guanajuato, which is the capital of the State of the same name, has a population of 80,000 inhabitants. It is built on the slopes of a mountain range, and is remarkable for the large number of fine churches, many of them of great antiquity. There are also many handsome residences, but for the superb gardens which front and sometimes entirely surround them. Guanajuato is celebrated as one of the famous silver-producing regions of Mexico, and it is this industry which has been the foundation of the prosperity and development of the city.

Guanajuato, on a branch line of the Mexican Central, is 252 miles (406 kilometers) north of the City of Mexico. It is the capital and chief city of the State of the same name, has 40,000 inhabitants, and is one of the wealthiest, oldest and most picturesque mining towns in the republic. The center of one of the richest mineral areas in the world, producing gold, silver, iron, tin, lead, copper, mercury, bismuth, hematite and sulphur, it is also very interesting through its many historical structures and places. Dolores Hidalgo, the residence of the parish priest of Hidalgo who raised the cry for independence in 1810, is a small town north of the capital. Guanajuato has electric light, tramcars and works constructed to control the waters of the river of the same name and to furnish drinking water to the city.

A few miles southeast is Irapuato, whence a branch runs west to Guadalajara, and from there via Colima to Manzanillo on the Pacific Ocean. A little to the east of Irapuato the two railroad lines connecting Mexico City with the United States join at Celaya and from there run, closely paralleling each other, to the City of Mexico.

The most important city before reaching the capital is Querétaro, the capital and chief city of the State of the same name, 167 miles (269 kilometers) north of Mexico City, with a population of 35,000. Here the plans for national independence were formed, here the Emperor Maximilian was shot, June 19, 1867, and from here in February, 1917, President Carranza promulgated the new Constitution. There are tramcars, banks, telephones and telegraphic communication with all the republic, and fine public buildings. Hercules, a short distance to the east of Querétaro, is noted as being the location of one of the largest textile mills in the country, with model workmen's homes.

Western Mexico

Guadalajara, 130,000 inhabitants, the capital and principal city of the State of Jalisco, is 381 miles (613 kilometers) from the City of Mexico. It is the second largest city in the republic, and contains fine public buildings, a large cathedral, a large theater, banks, a chamber of commerce, trolleys and electric lights and power, and in many ways is modern and progressive.

By the Colima-Manzanillo extension the Pacific Ocean is reached at the port of Manzanillo. The distance is 223 miles (359 kilometers) from Guadalajara.

Colima, 25,000 inhabitants, the capital and principal city of the State of the same name, on the banks of the Colima, 569 miles (915 kilometers) from the City of Mexico, is an old and picturesque town

BIRD'S-EYE VIEW OF ZACATECAS, MEXICO.
It is the capital of the State of the same name and is situated in a rich mining district, the city itself being built over a vein of silver.

noted for the beauty of its surroundings. The railway to the interior was opened in 1908. There are tramcars, electric lights, a theater, banks, a cathedral and interesting public buildings. The town was founded in 1523.

Manzanillo, 2,000 inhabitants, the port of entry for the State of Colima and the distributing center for this part of the west coast, stands at the extreme western point of a long narrow ridge of land separating the Pacific Ocean from the Laguna de Cuyutlan. The harbor is well sheltered. The breakwater is unusually massive and 1,500,000 tons of blue granite from the Colima quarries were used in its construction. On the seaward side it is protected by granite blocks weighing 30 tons each, while on the inner side the blocks weigh from 3 to 15 tons each. The structure extends for 600 feet into water 60 feet deep. It is over 300 feet wide at the bottom, with a cement crown 25 feet wide and 16 feet thick. Four years were required to finish it. The harbor thus created covers about 160 acres and affords a safe and ample anchorage for 100 vessels.

San Blas, just west of the city of Tepic, capital of the State of Nayarit, is a port with a good-sized foreign and local trade. The harbor facilities are to be improved.

The Southern Pacific Railway enters the State by its main line from Mazatlan, and is in operation to the capital, Tepic. Tepic has a population of 18,000, is about 500 miles from Mexico City, and has many fine public and private buildings. A railroad branch line is proposed to connect Tepic with San Blas directly, and the Southern Pacific is to be carried to Guadalajara, thus providing another through train connection between Mexico City and the Pacific coast of the United States.

Mazatlan, 30,000 inhabitants, is the principal port of the State of Sinaloa. Mazatlan is the most important town of the State and ranks as the chief industrial and commercial port on the Pacific Coast of Mexico. It has a weather bureau, a customhouse, a chamber of commerce, banks, good public buildings and a tramcar system. A good sewerage system has been installed.

Connection is made at Mazatlan with the Southern Pacific Railway of Mexico, which runs as far south as Tepic and provides direct railroad connection with California.

Altata is the port of Culiacan, capital of Sinaloa, with which it is connected by the Ferrocarril Occidental, 39 miles (63 kilometers) long.

Topolobampo, a splendid natural harbor, is the Pacific terminus

BIRD'S-EYE VIEW OF ZACATECAS, MEXICO.

It is the capital of the State of the same name and is situated in a rich mining district, the city itself being built over a vein of silver.

noted for the beauty of its surroundings. The railway to the interior was opened in 1908. There are tramcars, electric lights, a theater, banks, a cathedral and interesting public buildings. The town was founded in 1523.

Manzanillo, 2,000 inhabitants, the port of entry for the State of Colima and the distributing center for this part of the west coast, stands at the extreme western point of a long narrow ridge of land separating the Pacific Ocean from the Laguna de Cuyutlan. The harbor is well sheltered. The breakwater is unusually massive and 1,500,000 tons of blue granite from the Colima quarries were used in its construction. On the seaward side it is protected by granite blocks weighing 30 tons each, while on the inner side the blocks weigh from 3 to 15 tons each. The structure extends for 600 feet into water 60 feet deep. It is over 300 feet wide at the bottom, with a cement crown 25 feet wide and 16 feet thick. Four years were required to finish it. The harbor thus created covers about 160 acres and affords a safe and ample anchorage for 100 vessels.

San Blas, just west of the city of Tepic, capital of the State of Nayarit, is a port with a good-sized foreign and local trade. The harbor facilities are to be improved.

The Southern Pacific Railway enters the State by its main line from Mazatlan, and is in operation to the capital, Tepic. Tepic has a population of 18,000, is about 500 miles from Mexico City, and has many fine public and private buildings. A railroad branch line is proposed to connect Tepic with San Blas directly, and the Southern Pacific is to be carried to Guadalajara, thus providing another through train connection between Mexico City and the Pacific coast of the United States.

Mazatlan, 30,000 inhabitants, is the principal port of the State of Sinaloa. Mazatlan is the most important town of the State and ranks as the chief industrial and commercial port on the Pacific Coast of Mexico. It has a weather bureau, a customhouse, a chamber of commerce, banks, good public buildings and a tramcar system. A good sewerage system has been installed.

Connection is made at Mazatlan with the Southern Pacific Railway of Mexico, which runs as far south as Tepic and provides direct railroad connection with California.

Altata is the port of Culiacan, capital of Sinaloa, with which it is connected by the Ferrocarril Occidental, 39 miles (63 kilometers) long.

Topolobampo, a splendid natural harbor, is the Pacific terminus

of the Kansas City, Mexico and Orient Railway. The Southern Pacific makes connection with this railroad about 50 miles northeast of Topolobampo.

Guaymas, 15,000 inhabitants, in Sonora, is the northernmost port of Mexico on the Pacific side. It is situated on the Gulf of California, connected by rail with Hermosillo, the capital of the State, and the west coast system of railways in the United States. It is the second city of the State of Sonora. The harbor is land-locked, its depth at low tide is from 14 to 20 feet, admitting of the entrance of large vessels.

The Sonora Railway passes across the State between Guaymas and Nogales, the port of entry on the United States border. The Cananea, Rio Yaqui and Pacific Railway enters Sonora from the frontier station of Naco, while the Southern Pacific passes southward from Guaymas into the State of Sinaloa and has branches from the main line.

Hermosillo, 16,000 inhabitants, is the headquarters of the northern railway zone. It lies on the Sonora River and Sonora Railway. It is situated 184 miles south of the United States border, 1,700 miles (2,736 kilometers) from the City of Mexico, and has fine public buildings, banks and telegraphic connections with all points.

South of Manzanillo is Acapulco, 7,000 inhabitants, one of the best harbors on the Pacific coast. Vessels anchor in the open bay, as there are no wharves at this port. The bay is ample in size, of depth sufficient for any vessel afloat, and the harbor is practically land-locked. The approximate dimensions of the bay are: Distance from the mouth of the bay to the side directly opposite, 2¾ nautical miles; distance across the bay at its greatest width, 3½ nautical miles; average width of navigable channel at mouth of bay, 1½ nautical miles. Anchorage within the bay runs from 10 to 24 fathoms up to an average distance from the shore of three cables. Approximately two square miles of anchorage within the limits named are offered within the bay proper. Acapulco, one of the most interesting points historically of the Pacific, was long the port of entry for the Spanish galleons from the Philippines. It has no railroad connections with the interior, though a railroad is projected to Iguala, the chief city of the State of Guerrero, on a branch of the Mexican Central.

Southeast of Acapulco is Puerto Angel, a minor port, and to the east of that is Salina Cruz, 5,000 inhabitants, the Pacific terminus of the Tehuantepec Railway. This port is provided with modern facilities for the quick handling of cargoes. The length of the wharf alongside which vessels may berth is five-eights of a mile. There

Courtesy of *Travel*

VIEW OF THE PORT OF MAZATLAN, STATE OF SINALOA.

The sea coast of the State of Sinaloa is about 317 miles long, and is well supplied with bays and natural harbors, there being three ports of entry, viz., Mazatlan, Altata, and Topolobampo. The picturesque location of the first named is shown in the above reproduction of a recent photograph.

of the Kansas City, Mexico and Orient Railway. The Southern Pacific makes connection with this railroad about 50 miles northeast of Topolobampo.

Guaymas, 15,000 inhabitants, in Sonora, is the northernmost port of Mexico on the Pacific side. It is situated on the Gulf of California, connected by rail with Hermosillo, the capital of the State, and the west coast system of railways in the United States. It is the second city of the State of Sonora. The harbor is land-locked, its depth at low tide is from 14 to 20 feet, admitting of the entrance of large vessels.

The Sonora Railway passes across the State between Guaymas and Nogales, the port of entry on the United States border. The Cananea, Rio Yaqui and Pacific Railway enters Sonora from the frontier station of Naco, while the Southern Pacific passes southward from Guaymas into the State of Sinaloa and has branches from the main line.

Hermosillo, 16,000 inhabitants, is the headquarters of the northern railway zone. It lies on the Sonora River and Sonora Railway. It is situated 184 miles south of the United States border, 1,700 miles (2,736 kilometers) from the City of Mexico, and has fine public buildings, banks and telegraphic connections with all points.

South of Manzanillo is Acapulco, 7,000 inhabitants, one of the best harbors on the Pacific coast. Vessels anchor in the open bay, as there are no wharves at this port. The bay is ample in size, of depth sufficient for any vessel afloat, and the harbor is practically land-locked. The approximate dimensions of the bay are: Distance from the mouth of the bay to the side directly opposite, 2¾ nautical miles; distance across the bay at its greatest width, 3½ nautical miles; average width of navigable channel at mouth of bay, 1½ nautical miles. Anchorage within the bay runs from 10 to 24 fathoms up to an average distance from the shore of three cables. Approximately two square miles of anchorage within the limits named are offered within the bay proper. Acapulco, one of the most interesting points historically of the Pacific, was long the port of entry for the Spanish galleons from the Philippines. It has no railroad connections with the interior, though a railroad is projected to Iguala, the chief city of the State of Guerrero, on a branch of the Mexican Central.

Southeast of Acapulco is Puerto Angel, a minor port, and to the east of that is Salina Cruz, 5,000 inhabitants, the Pacific terminus of the Tehuantepec Railway. This port is provided with modern facilities for the quick handling of cargoes. The length of the wharf alongside which vessels may berth is five-eights of a mile. There

VIEW OF THE PORT OF MAZATLAN, STATE OF SINALOA.

Courtesy of *Travel*.

The sea coast of the State of Sinaloa is about 317 miles long, and is well supplied with bays and natural harbors, there being three ports of entry, viz., Mazatlan, Altata, and Topolobampo. The picturesque location of the first named is shown in the above reproduction of a recent photograph.

are 20 movable electric cranes for use in loading and unloading cargo. The depth of water is 34 feet, and this depth is found where the vessels dock. The outer harbor is formed by two breakwaters. All of Salina Cruz is federal property.

Lower California

Opposite the States of Sonora and Sinaloa and across the Gulf of California lies the peninsula of Lower California, one of the two territories of the republic. It is bounded on the north by the United States. Its coast line measures 1,864 miles. Its principal bays, where the ports open to foreign commerce are found, are La Paz and Santa Rosalia, on the Gulf of California, and Enseñada and Magdalena, on the Pacific. A few miles of railway have been built by the mining enterprises of the territory, and the Southern Pacific has a division entering the territory and cutting across it to the Colorado River at the location of the international dam.

The Isthmus of Tehuantepec

The Isthmus of Tehuantepec comprises parts of the States of Veracruz and Oaxaca. The distance from ocean to ocean across the isthmus is 125 miles (201 kilometers) over level ground; the highest point, at Chivela Pass, being only 730 feet. The main line of the Tehuantepec National Railway from Puerto Mexico (Coatzacoalcos) on the Atlantic to Salina Cruz on the Pacific is 189 miles, and there are branches to San Juan Evangelista, to the north, and to Minatitlán to the south. At Santa Lucrecia connection is made with the Veracruz and Isthmus Railway for Cordoba and Mexico City and for Tierra Blanca and Veracruz. At Gamboa connection is made with the Pan-American Railway running through the State of Chiapas south to the Guatemalan border.

The port of Puerto Mexico is the Atlantic terminus of the Tehuantepec National Railway. The Coatzacoalcos River forms a natural harbor of unlimited capacity, with an average depth to the town of 50 feet of water. The bar at the mouth has been cleared away by the construction of two jetties, the entrance channel having a depth of 30 feet, which is the minimum depth alongside the wharves.

The Pan-American Railway was completed in 1909. The main division starts from Gamboa on the Tehuantepec National, and its total length is 284 miles (457 kilometers). After crossing the Suchiate River between the republics of Mexico and Central America connection

is made with the Guatemalan Railway system, thus forming one more link in the line covered by the general term Pan-American Railway. There is a branch line, 13 miles long (21 kilometers), from Tonalá to Puerto Arista on the Pacific.

South and east of the Isthmus of Tehuantepec on the Gulf side are the States of Tabasco, Campeche, and Yucatan.

Southern Mexico

The State of Tabasco has only a few miles of railway but the best system of water connections in Mexico by means of navigable rivers. Frontera, the principal port of the State, is the natural gateway to the interior, and is situated on the Grijalva River, at the head of Tabasco Bay, 72 miles (116 kilometers) below the State capital, San Juan Bautista. The port is in regular communication with others in Mexico, and steamers from abroad make Frontera a port of call on many of their trips. Regular traffic is maintained by interior river steamers on the Grijalva, Usumacinta, and Palizada Rivers.

The depth of water at Frontera at the wharf is from 25 to 30 feet. Steamers of 800 to 1,000 tons can enter this port under favorable conditions at the bar, where the depth varies from 8 to 10 and even 12 feet.

The capital and chief city of Tabasco is San Juan Bautista, on the Grijalva River, founded in 1598. It has fine public buildings and many modern improvements. It is a growing rubber center.

Campeche, 22,000 inhabitants, is the capital and port of the State of the same name. The port has safe anchorage for vessels of moderate draft. Regular communication is maintained with the other Mexican ports, and also with United States and European ports. Founded in 1517, the city is nevertheless modern in many respects, having telegraph and telephone communication, public buildings of interest, good libraries, a bank, theaters, and a hospital.

A railway, part of the United Railways of Yucatan system, connects Campeche with Mérida, a distance of 107 miles (172 kilometers).

Mérida, 60,000 inhabitants, is the capital and chief city of Yucatan. It was originally a settlement of Maya Indians, and was conquered shortly after Cortés invaded Mexico. It has been completely rebuilt and today is modern in all respects, with tramcars, electric lights, telephones, fine public buildings, banks, a board of trade, a theater, an excellent museum, good schools and extensive parks.

Progreso is the port of Mérida. The approach is difficult on ac-

count of the shoals, and vessels have to anchor a distance from shore. Progreso has close and frequent rail communication with the interior. The United Railways of Yucatan system reaches the best developed agricultural sections of the country.

Quintana Roo, south of Yucatan and north of Guatemala and British Honduras, was created a Territory in 1900. A few natural harbors exist along the coast, but navigation is dangerous because of reefs. Bahía Ascensión and Bahía Espiritu Santo are protected and have an average depth of three fathoms. The Mexican government has begun the construction of an artificial harbor at Xcalak, which is to be the outlet of the interior. Payo Obispo on Bahía de Chetumal, at the mouth of the Rio Hondo, the only navigable river, and the boundary between British Honduras and Mexico, has a customhouse through which most of the foreign trade passes. A military railway, a few miles long, is operated from Vijia Chica on Ascensión Bay to Santa Cruz de Bravo. Under construction is an extension of this railway, for about 100 miles (160 kilometers) further, to Peto, where connection will be made with the United Railways of Yucatan. Santa Cruz de Bravo is the capital city of the territory. It is a military post of 2,000 inhabitants and some modern conveniences, and telegraph communication with all parts of the Republic.

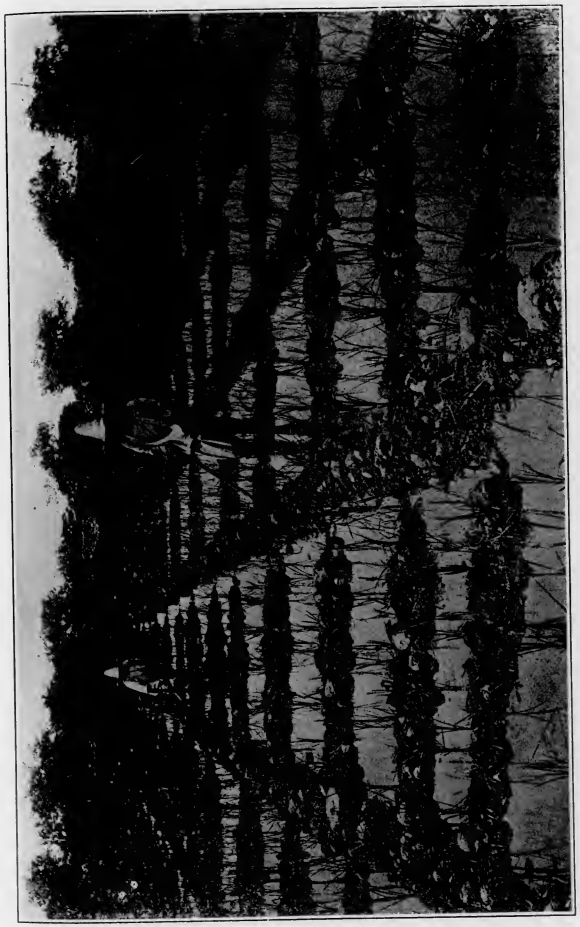
The Federal Capital

The city of Mexico, the capital of the United Mexican States, lies in the Federal District, which has an area of 579 square miles, population of about 800,000 inhabitants.

The City of Mexico is probably the oldest city in America. It was the ancient capital of the Aztecs, and before the Aztecs came, the Nahualtecs, the Chicimecs and the Toltecs. This capital is one of the most beautiful in the world. The altitude is 7,875 feet. The location in a protected valley makes the climate very pleasant, although there are some disagreeable days in mid-winter and in the summer rainy season.

The valley is well drained and has abundant water supply. There is a well-developed and equipped system of electric tramcars and electric lights, which makes the city very modern in most of its aspects.

Among the fine public buildings, some of them of historical merit, others representing the latest characteristics of modern architecture, are the Cathedral, the National Palace, the Library, and Museum, the Postoffice, the Mint, Palace of Justice, and clubs, theaters, hotels,



AN IRRIGATED RICE FIELD IN MEXICO.

Copyright by C. B. Waite.

Rice is one of the staple products of certain sections of Mexico. The States of Colima and Guerrero lead in point of production, but important rice plantations are also found in the municipalities of Tuxpa and Tlapa in the State of Puebla. The section where the cereal has been most successfully produced lie between the parallels of 17 and 19 degrees north latitude, at altitudes of 1,000 to 1,500 feet above sea level. The States of Michoacan and Puebla also produce considerable quantities. The annual production of the country, prior to the disturbed political conditions, amounted to about 1,200,000 bushels.

count of the shoals, and vessels have to anchor a distance from shore. Progreso has close and frequent rail communication with the interior. The United Railways of Yucatan system reaches the best developed agricultural sections of the country.

Quintana Roo, south of Yucatan and north of Guatemala and British Honduras, was created a Territory in 1900. A few natural harbors exist along the coast, but navigation is dangerous because of reefs. Bahía Ascensión and Bahía Espiritu Santo are protected and have an average depth of three fathoms. The Mexican government has begun the construction of an artificial harbor at Xcalak, which is to be the outlet of the interior. Payo Obispo on Bahía de Chetumal, at the mouth of the Rio Hondo, the only navigable river, and the boundary between British Honduras and Mexico, has a customhouse through which most of the foreign trade passes. A military railway, a few miles long, is operated from Vijia Chica on Ascensión Bay to Santa Cruz de Bravo. Under construction is an extension of this railway, for about 100 miles (160 kilometers) further, to Peto, where connection will be made with the United Railways of Yucatan. Santa Cruz de Bravo is the capital city of the territory. It is a military post of 2,000 inhabitants and some modern conveniences, and telegraph communication with all parts of the Republic.

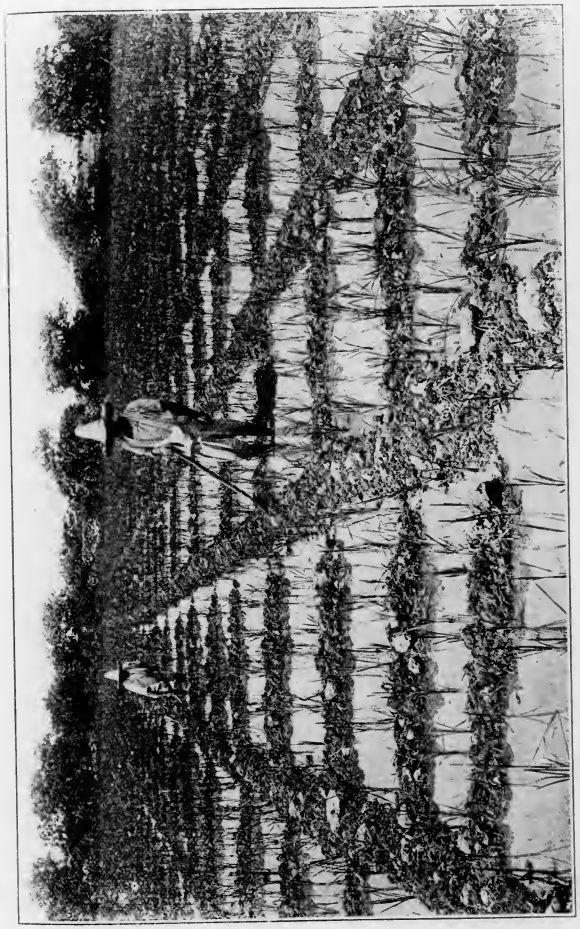
The Federal Capital

The city of Mexico, the capital of the United Mexican States, lies in the Federal District, which has an area of 579 square miles, population of about 800,000 inhabitants.

The City of Mexico is probably the oldest city in America. It was the ancient capital of the Aztecs, and before the Aztecs came, the Nahualtecs, the Chicimecs and the Toltecs. This capital is one of the most beautiful in the world. The altitude is 7,875 feet. The location in a protected valley makes the climate very pleasant, although there are some disagreeable days in mid-winter and in the summer rainy season.

The valley is well drained and has abundant water supply. There is a well-developed and equipped system of electric tramcars and electric lights, which makes the city very modern in most of its aspects.

Among the fine public buildings, some of them of historical merit, others representing the latest characteristics of modern architecture, are the Cathedral, the National Palace, the Library, and Museum, the Postoffice, the Mint, Palace of Justice, and clubs, theaters, hotels,



AN IRRIGATED RICE FIELD IN MEXICO.

Copyrighted by C. B. Waite.

Rice is one of the staple products of certain sections of Mexico. The States of Colima and Guerrero lead in point of production, but important rice plantations are also found in the municipalities of Tonpa and Tuxpa, in the State of Tabasco, and in the Tierra Caliente sections of Morelos and Puebla. Rice is grown in Mexico between the parallels of 17° and 30° north latitude. There are 4 distinct varieties cultivated, and Mexico also produces considerable quantities. The annual production of the country, prior to the disturbed political conditions, amounted to about 1,250,000 bushels.

private mansions, hospitals, schools, business blocks, etc., and the Palace of Chapultepec. The corner-stone of the Cathedral was laid in 1573 but the edifice was not completed until 1667. It occupies the site of the first Christian Church built on the continent (completed in 1525) which was demolished to make way for the new building.

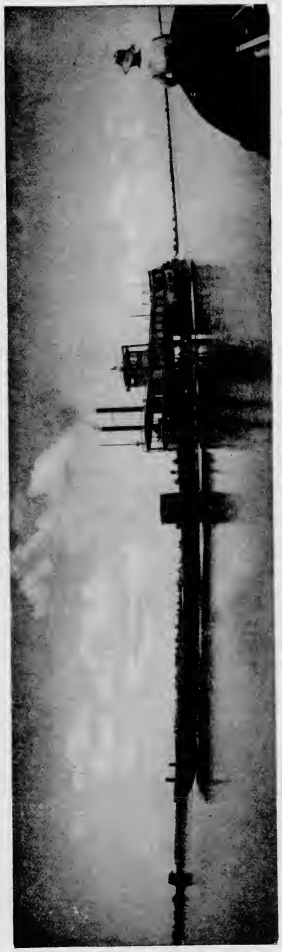
From the City of Mexico the following interior points are reached: Oaxaca, via Puebla on the Mexican Southern Railway; Toluca and Morelia, by the National Railways of Mexico; Cuernavaca and Iguala by the Mexican Central, besides other cities already mentioned.

South Central Mexico

Puebla, 125,000 inhabitants, 139 miles (210 kilometers) from the capital is reached by trains making the trip in 5 hours. Puebla is the capital and chief city of the State of the same name and the third city of the republic. It is a great commercial and distributing center, and, on account of the number and size of the cotton mills in its vicinity, has been called the Manchester of Mexico. Its architecture is of decided merit, and it has the reputation of being one of the cleanest and healthiest of Mexican cities. It has a cathedral and a great many other churches, a fine library, a medical school, academy of fine arts, and many schools, a chamber of commerce, banks, several good hospitals, hotels, and theaters. Electric light, tramcars, telephone, and power service are in use. Glass and other factories, in addition to the textile mills, are found in Puebla, and the tiles made here are in demand throughout the country for structural work. In the vicinity are Atlixco, interesting historically and for its textile mills; San Pedro Cholula, the location of a prehistoric pyramid; and Tehuacan, famous for its mineral waters.

Oaxaca City is reached from Puebla by the Mexican Southern. The distance is 228 miles (367 kilometers). The trip takes 12 hours. Oaxaca is the capital of the State of the same name and one of the most interesting cities of the republic. It is 288 miles (464 kilometers) from Mexico City and the same distance from Veracruz. Its population is 40,000. It was the early home of both Porfirio Diaz, former president, and Benito Juarez, the patriot and national hero. Its age makes it very attractive, but it is quite modern in many ways, possessing tramcars, electric lights, telephones, and other factors of comfort. About 25 miles to the southeast of Oaxaca are the ruins of Mitla, some of the best preserved prehistoric remains of all Mexico.

Toluca, with 32,000 inhabitants, is the capital and principal city of the State of Mexico. It is 45 miles (73 kilometers) from Mexico



THE OIL INDUSTRY IN MEXICO.

Copyright Underwood & Underwood.

Mexico furnishes a remarkable record of oil development. From 1909 to 1920 the production increased from less than 3,000,000 to near 160,000,000 barrels. Upper picture: The Dos Bocas well, the overflow from which produced a lake of oil extending for a distance of 11 miles and covering over 1,000 acres. The Panuco-Ebano field is one of the richest and most productive in the world, with wells of from 50 to 60 miles. Lower picture: A barge on the Panuco River transporting 5,000 barrels of crude oil from the field of production to Tampico.

private mansions, hospitals, schools, business blocks, etc., and the Palace of Chapultepec. The corner-stone of the Cathedral was laid in 1573 but the edifice was not completed until 1667. It occupies the site of the first Christian Church built on the continent (completed in 1525) which was demolished to make way for the new building.

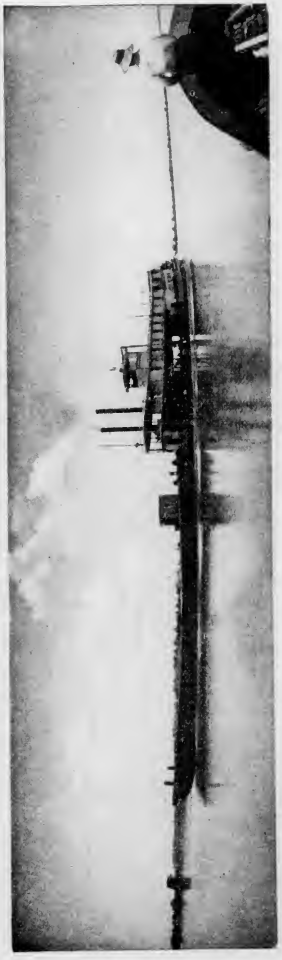
From the City of Mexico the following interior points are reached: Oaxaca, via Puebla on the Mexican Southern Railway; Toluca and Morelia, by the National Railways of Mexico; Cuernavaca and Iguala by the Mexican Central, besides other cities already mentioned.

South Central Mexico

Puebla, 125,000 inhabitants, 139 miles (210 kilometers) from the capital is reached by trains making the trip in 5 hours. Puebla is the capital and chief city of the State of the same name and the third city of the republic. It is a great commercial and distributing center, and, on account of the number and size of the cotton mills in its vicinity, has been called the Manchester of Mexico. Its architecture is of decided merit, and it has the reputation of being one of the cleanest and healthiest of Mexican cities. It has a cathedral and a great many other churches, a fine library, a medical school, academy of fine arts, and many schools, a chamber of commerce, banks, several good hospitals, hotels, and theaters. Electric light, tramcars, telephone, and power service are in use. Glass and other factories, in addition to the textile mills, are found in Puebla, and the tiles made here are in demand throughout the country for structural work. In the vicinity are Atlixco, interesting historically and for its textile mills; San Pedro Cholula, the location of a prehistoric pyramid; and Tehuacan, famous for its mineral waters.

Oaxaca City is reached from Puebla by the Mexican Southern. The distance is 228 miles (367 kilometers). The trip takes 12 hours. Oaxaca is the capital of the State of the same name and one of the most interesting cities of the republic. It is 288 miles (464 kilometers) from Mexico City and the same distance from Veracruz. Its population is 40,000. It was the early home of both Porfirio Diaz, former president, and Benito Juarez, the patriot and national hero. Its age makes it very attractive, but it is quite modern in many ways, possessing tramcars, electric lights, telephones, and other factors of comfort. About 25 miles to the southeast of Oaxaca are the ruins of Mitla, some of the best preserved prehistoric remains of all Mexico.

Toluca, with 32,000 inhabitants, is the capital and principal city of the State of Mexico. It is 45 miles (73 kilometers) from Mexico



THE OIL INDUSTRY IN MEXICO.

Copyright Underwood & Underwood.

Mexico furnishes a remarkable record of oil development. From 1909 to 1920 the production increased from less than 3,000,000 to near 160,000,000 barrels. Upper picture: The Dos Bocas well, the overflow from which produced a lake of oil extending for a distance of 1½ miles and covering over 1,000 acres on the Tuxpam bia of from 50 to 60 miles. Lower picture: A barge on the Tamesi River transporting 5,000 barrels of crude oil from the field of production to Tampico.

City. It is an important commercial center, well drained and healthy, with many new buildings, including hospitals, schools, and an academy of music. There are tramcars, telephones and electric lights.

Morelia, the capital of the State of Michoacan, is 227 miles (366 kilometers) from Mexico City and has a population of 41,000. It has a number of fine public buildings and a very fine cathedral. There are telephones, electric lights, tramcar service and banks.

One of the most attractive places in all Mexico is Cuernavaca, the capital of the State of Morelos and a famous resort. The train covers the 47 miles (76 kilometers) to Mexico City in 4 hours. The trip is one of the most picturesque in the republic. The population of Cuernavaca is 18,000. It is a commercial center, possessing very fine public buildings, among them the palace of Cortés, an observatory, a public library, a cathedral, banks, good parks, and the Borda Gardens.

Products and Industries

Agriculture is and always has been the chief industry of the Mexican people. The number of persons engaged in agriculture, including stock raising, largely outnumbers those engaged in all other industries. But Mexican agriculture in the main is on a domestic basis. With some exceptions, Mexico does not produce agricultural products for export. The economic development of the country as serving foreign trade has been almost entirely toward mineral production. In this respect Mexico has not changed for near 400 years. It was in Cortés' time and is yet one of the great natural storehouses from which the world draws minerals. This fact obscures and has always obscured the other fact, more important to Mexico if not to the world, that Mexico is naturally an agricultural and grazing country. Supplying the food needs of a population, sparse if regard be had to the extent of the country but large in the aggregate, was the ordinary and everyday work of the great mass of the people before the Spaniards came and it is the same today. That Mexican agriculture on the whole has not kept pace with mining as a feeder to foreign trade is due to several causes, but one of them is not that the soil, climate and other natural attributes of Mexico are not suited to make the country a great producer of grain, fibers and meat for foreign export since no country is better suited therefor. One reason may be a trend of mind inherited from the Spanish conquerors who were looking for gold and silver and who valued the finding of these more than all else. That lack of discernment that made the adventurer pass by the accessible and fertile lowlands of South America to seek fortune among the

almost inaccessible peaks of the high Andes, that for 200 years neglected the rich plains of Argentina while developing the mines of Potosí, in Mexico, left to the uninstructed Indian the development of what, after all, is the country's greater source of wealth. The best intelligence, skill, energy and enterprise of the Mexican people have been diverted to mining, and away from agriculture. But there are exceptions, both individual and general. At least one agricultural industry, the production of henequen fiber, has been carried on in a skillful and economic manner.

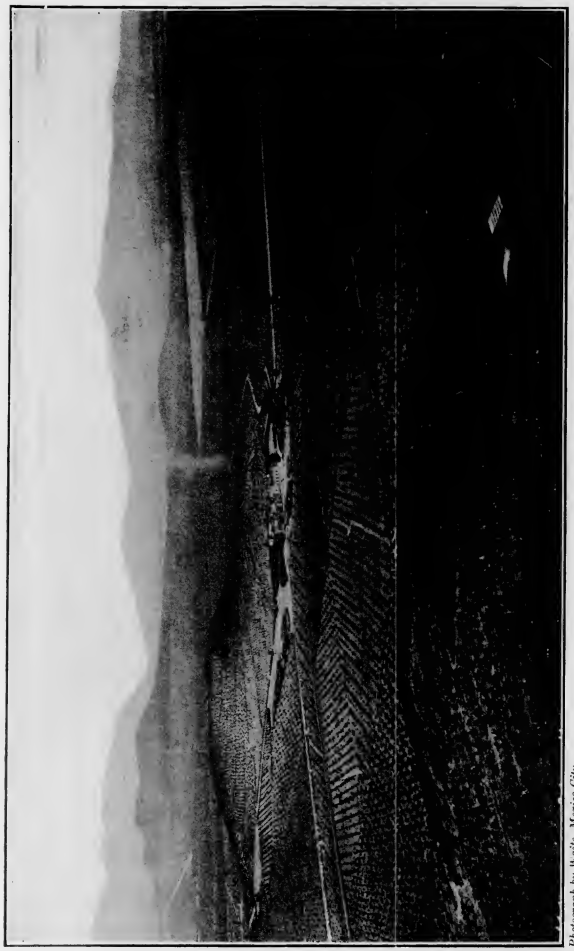
There are no figures of agricultural production derived from actual enumeration. All statements are estimates and in most cases manifest underestimates. The agricultural production of Mexico cannot be less than $600,000,000 per annum. More likely it is nearer twice this sum, but the exports of everything which may be classed as agricultural, including animal products, does not rise ordinarily to above 5 per cent of the estimate and this is offset in a large degree by Mexican imports of foodstuffs.

The cultivation of henequen, sometimes known in the United States as sisal, in the State of Yucatan accounts for half or more than half of the total export of Mexican agricultural produce. Nearly the whole of the henequen crop is exported. Another export crop is ixtle (Tampico) fiber, the value of which is approximately one-tenth of the henequen crop. Next in importance to henequen, as an export crop is cotton, followed by coffee. The export of the two together approximate in value only about one-half the value of henequen export, but the value of the total cotton crop produced exceeds the value of the henequen. The value of the sugar crop is about equal to the henequen.

One of the most important food crops of Mexico is frijoles. The word "frijol" in Spanish America connotes almost any variety of cultivated beans, but in Mexico it is applied almost exclusively to the brown or spotted varieties known in English speaking countries as kidney beans.

No satisfactory estimate of the quantity of frijoles produced can be made. Next to Indian corn they form the chief vegetable diet of the people. In all probability the production exceeds 30,000,000 bushels and if so th value of the crop would be second to corn. Only about 2 or 3 per cent of the frijol crop is exported.

Garbanzos (chick peas) are grown to a large amount in Mexico but although relished by Mexicans they have not the important place in Mexican dietary that they have in Southern Europe and some of



MAGUEY HACIENDAS IN THE VALLEY OF MEXICO.

The rows of maguey plants stretch for miles in parallel columns across the plateau, and from the hills above look like giant hedges.

Photograph by Waite, Mexico City.

the South American countries. This accounts for the fact that while the export of garbanzos ordinarily out-values the export of frijoles five to one, the production of garbanzos is probably less than one-fifth the production of frijoles. Perhaps near one-half the garbanzo crop is exported to Spain and South America.

Outside of those mentioned, vanilla, cacao, fresh fruits, sarsaparilla, barley, and peppers are other agricultural products on an export base. Of these vanilla and cacao are the chief in export, but not in production.

The great crop of Mexico is corn which is not on an export base. Some years Mexico exports a little corn, but ordinarily it imports more than it exports. The production of corn, like the production of frijoles, can only be estimated very roughly. It probably is near one-tenth the production of the United States or about 250,000,000 to 300,000,000 bushels. Corn is the base food of the great bulk of the Mexican people. A failure of the corn crop would mean starvation for more than half the inhabitants, but there has never been a general failure, and is not likely ever to be. Corn crop failures in Mexico are confined to small areas. This fact is due to two causes: First, the almost infinite variety of Mexican climatic conditions where corn is grown. Changes (such as a deficiency in rain fall) do not occur over extensive areas in Mexico as they do in the corn-producing sections of the United States; second, the great number of varieties of Mexican corn adapted each to the climatic conditions of a particular area give a certainty to Mexican corn production that United States corn production does not have.

In Mexico corn will grow and produce satisfactorily although rain may not fall at any time during the growing season, the plants depending upon deep-lying moisture from winter rains or other hydrologic cause. In another section corn will likewise grow where there is no such under soil water and where rain, properly speaking, falls rarely or not at all but where there is an almost daily mist or heavy dew, that slightly moistens for an hour or two an inch or more of the top surface.

Both of these sections are to be considered arid or semi-arid and no variety of corn grown in the United States would produce in either; but in Mexico, in the first case, a particular variety of corn indigenous to the locality is grown which has a deep root system, like alfalfa, that does make use of the deep-lying moisture to sustain and develop the plant. In the second case the variety grown is one whose roots

MAGUEY HACIENDAS IN THE VALLEY OF MEXICO.

The rows of maguey plants stretch for miles in parallel columns across the plateau, and from the hills above look like giant hedges.

Photograph by Waite, Mexico City.

the South American countries. This accounts for the fact that while the export of garbanzos ordinarily out-values the export of frijoles five to one, the production of garbanzos is probably less than one-fifth the production of frijoles. Perhaps near one-half the garbanzo crop is exported to Spain and South America.

Outside of those mentioned, vanilla, cacao, fresh fruits, sarsaparilla, barley, and peppers are other agricultural products on an export base. Of these vanilla and cacao are the chief in export, but not in production.

The great crop of Mexico is corn which is not on an export base. Some years Mexico exports a little corn, but ordinarily it imports more than it exports. The production of corn, like the production of frijoles, can only be estimated very roughly. It probably is near one-tenth the production of the United States or about 250,000,000 to 300,000,000 bushels. Corn is the base food of the great bulk of the Mexican people. A failure of the corn crop would mean starvation for more than half the inhabitants, but there has never been a general failure, and is not likely ever to be. Corn crop failures in Mexico are confined to small areas. This fact is due to two causes: First, the almost infinite variety of Mexican climatic conditions where corn is grown. Changes (such as a deficiency in rain fall) do not occur over extensive areas in Mexico as they do in the corn-producing sections of the United States; second, the great number of varieties of Mexican corn adapted each to the climatic conditions of a particular area give a certainty to Mexican corn production that United States corn production does not have.

In Mexico corn will grow and produce satisfactorily although rain may not fall at any time during the growing season, the plants depending upon deep-lying moisture from winter rains or other hydrologic cause. In another section corn will likewise grow where there is no such under soil water and where rain, properly speaking, falls rarely or not at all but where there is an almost daily mist or heavy dew, that slightly moistens for an hour or two an inch or more of the top surface.

Both of these sections are to be considered arid or semi-arid and no variety of corn grown in the United States would produce in either; but in Mexico, in the first case, a particular variety of corn indigenous to the locality is grown which has a deep root system, like alfalfa, that does make use of the deep-lying moisture to sustain and develop the plant. In the second case the variety grown is one whose roots

lie almost on the surface thereby enabling the plant to draw and use the transient surface moisture.

There are but few localities in Mexico under 9,000 feet where is not cultivated a variety of corn suited to the conditions of plant life of the particular locality.

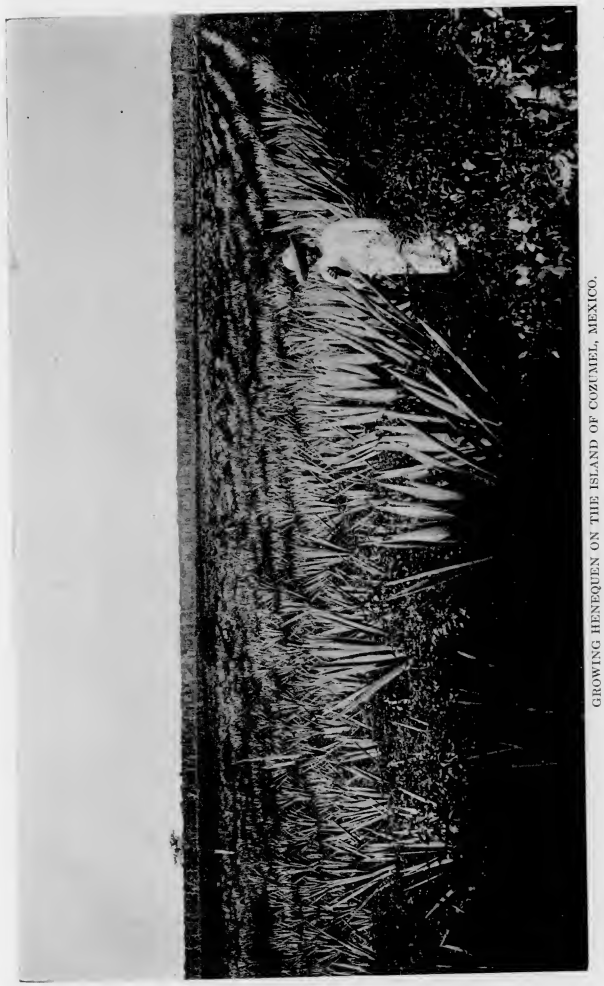
One of the greatest opportunities in agricultural development in Mexico is afforded by tobacco culture. Notwithstanding the excellence of Mexican cigar leaf and the extensive territory suited to the production of the best native and imported varieties, this crop has never attained a position of international trade consequence. Mexico might easily be a serious rival to Cuba, and will be, if more attention be given to the tobacco crop. Improvements in methods of culture and in curing, grading, packing and handling the output are necessary as a first step toward giving the cigar made from Mexican tobacco the position in the world's estimation that it really deserves.

Of forest products chicle and mahogany are the chief. Cedar, logwood and zaceton root are also important. Each of these industries is capable of very considerable enlargement. Rubber and guayule are semi-cultivated. There has been a falling off in rubber and guayule production in recent years. A few years ago the two together accounted for about $12,000,000 exports.

Effective plantation production of rubber from the castilloa tree (*castilla elastica*) or from the guayule shrub (*parthenium argentatum*) has never been accomplished in Mexico. The Hevea tree has not been tried out. There appears to be no reason why rubber can not be produced as a plantation crop as well in Mexico as in the East Indies, but it is doubtful if rubber gathering, as a forest or as a semi-cultivated industry, in Mexico or elsewhere, can for long compete with plantation production. It is therefore quite possible that the rubber-producing industry in Mexico will die out unless it be reconstructed on the basis of the plantation.

A most important element of Mexican agricultural wealth is cattle raising and it is the industry that with the least effort can be brought to a much larger development.

The number of cattle in Mexico is probably largely in excess of the estimates ordinarily accepted. A recent estimate of domestic animals published under official sanction gives the number of horned cattle at 2,160,000, horses 930,000, mules 355,000, asses 288,000, sheep 1,090,000, goats 2,000,000, and hogs 1,660,000. The estimates are almost wholly guesses based upon very little or no personal observation. In all probability the number of horned cattle exceeds the estimate above by



GROWING HENEQUEN ON THE ISLAND OF COZUMEL, MEXICO.

The leading product of Yucatan is henequen, the fiber of which is known throughout the world for its value as a rope and cordage material. The growing of this plant is one of the established industries of the island of Cozumel, one plantation having 615 acres devoted to the cultivation of henequen.

lie almost on the surface thereby enabling the plant to draw and use the transient surface moisture.

There are but few localities in Mexico under 9,000 feet where is not cultivated a variety of corn suited to the conditions of plant life of the particular locality.

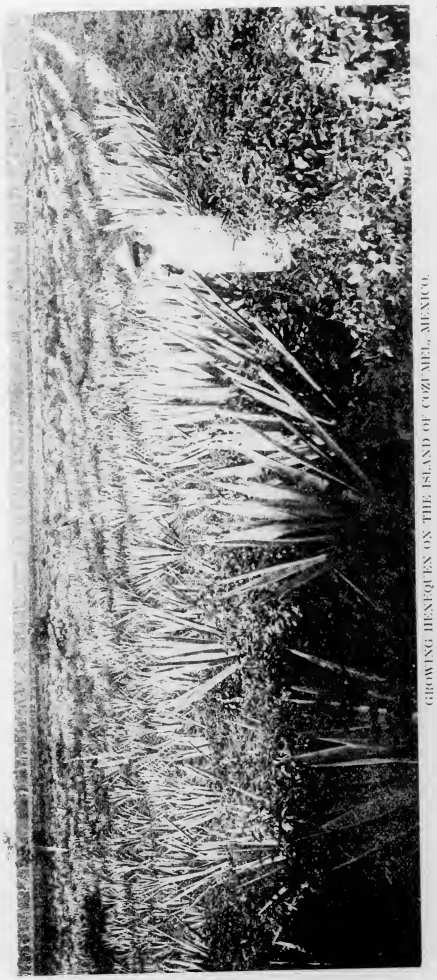
One of the greatest opportunities in agricultural development in Mexico is afforded by tobacco culture. Notwithstanding the excellence of Mexican cigar leaf and the extensive territory suited to the production of the best native and imported varieties, this crop has never attained a position of international trade consequence. Mexico might easily be a serious rival to Cuba, and will be, if more attention be given to the tobacco crop. Improvements in methods of culture and in curing, grading, packing and handling the output are necessary as a first step toward giving the cigar made from Mexican tobacco the position in the world's estimation that it really deserves.

Of forest products chicle and mahogany are the chief. Cedar, logwood and zaceton root are also important. Each of these industries is capable of very considerable enlargement. Rubber and guayule are semi-cultivated. There has been a falling off in rubber and guayule production in recent years. A few years ago the two together accounted for about $12,000,000 exports.

Effective plantation production of rubber from the castilloa tree (*castilla elastica*) or from the guayule shrub (*parthenium argentatum*) has never been accomplished in Mexico. The Hevea tree has not been tried out. There appears to be no reason why rubber can not be produced as a plantation crop as well in Mexico as in the East Indies, but it is doubtful if rubber gathering, as a forest or as a semi-cultivated industry, in Mexico or elsewhere, can for long compete with plantation production. It is therefore quite possible that the rubber-producing industry in Mexico will die out unless it be reconstructed on the basis of the plantation.

A most important element of Mexican agricultural wealth is cattle raising and it is the industry that with the least effort can be brought to a much larger development.

The number of cattle in Mexico is probably largely in excess of the estimates ordinarily accepted. A recent estimate of domestic animals published under official sanction gives the number of horned cattle at 2,160,000, horses 930,000, mules 355,000, asses 288,000, sheep 1,090,000, goats 2,000,000, and hogs 1,660,000. The estimates are almost wholly guesses based upon very little or no personal observation. In all probability the number of horned cattle exceeds the estimate above by



GROWING HENEQUEN ON THE ISLAND OF COZUMEL, MEXICO.

The leading product of Yucatan is henequen, the fiber of which is known throughout the world for its value as a rope and cordage material. The growing of this plant is one of the established industries of the island of Cozumel, one plantation having 618 acres devoted to the cultivation of henequen.

at least 50 per cent. There is little doubt that asses and goats are in greater numbers than given.

Mining

Mining is the most highly developed and best organized of Mexican industries. It is the industry that has been especially attractive to foreign capital, but except as to oil, Mexican mining is not the result of foreign initiative. Mining is distinctively a native industry which had its beginning before the Spanish conquest, but owes its chief development to the skill and enterprise of the Spaniards and their descendants.

Mining accounts for about two-thirds of the Mexican export trade and mining supplies, machinery and tools form a very large proportion of the import trade. The railroad development is due to mining more than to all other industries combined. In fact, Mexican industrial progress, with but few exceptions, is measured in terms of mining. In the early days gold and silver were the only considered metals, and, leaving out oil, these two metals now account for about 60 per cent of Mexican mining production. In recent years copper has become of more consequence than gold and is pushing hard on silver.

Most of the gold mined in Mexico is in connection with silver. A large proportion of argentiferous ore carries some gold. There are, however, a number of localities where gold is or has been the chief value. Lower California, Chihuahua, Durango, Michoacán, Puebla, Sinaloa and Sonora are States in which gold mining as such has yielded good results.

Except in parts of the Gulf and Pacific coasts there are more or less productive mines in all parts of Mexico. The chief mineral zone extends from the United States frontier in the State of Chihuahua in an almost straight line to the Isthmus of Tehuantepec, and then bends northeast into Chiapas. The average width of this zone is about 50 miles, although in places it is much broader. Outside of this zone there are a number of important mineral belts. The best known mining districts are near the center of the main zone in Zacatecas, Durango, Querétero, Mexico (state), and Oaxaca.

Lead is very widely distributed. The best known localities are in connection with silver, but independent lead deposits are known and some are worked in Hidalgo, Querétero, Oaxaca, Jalisco and Puebla.

Less apparently is known of the extent of copper deposits, than of silver, lead, and gold, but that the copper resources of Mexico are enormous is beyond doubt. Of the copper districts may be mentioned the States of Michoacán, Mexico, Guerrero, Lower California, and

METLAC BRIDGE, MEXICAN RAILWAY.

The port of Veracruz has four railways, two of which connect it with the capital. The line of the Mexican Railway, the first one built in the Republic, is a most notable engineering feat and offers extraordinary scenic beauty. The Metlac Bridge, over the river of that name, is 138 meters long, 100 in radius, and 28 in height. The Metlac viaduct, whose weight is estimated to be 600 tons, is 978 meters above the level of the sea.

at least 50 per cent. There is little doubt that asses and goats are in greater numbers than given.

Mining

Mining is the most highly developed and best organized of Mexican industries. It is the industry that has been especially attractive to foreign capital, but except as to oil, Mexican mining is not the result of foreign initiative. Mining is distinctively a native industry which had its beginning before the Spanish conquest, but owes its chief development to the skill and enterprise of the Spaniards and their descendants.

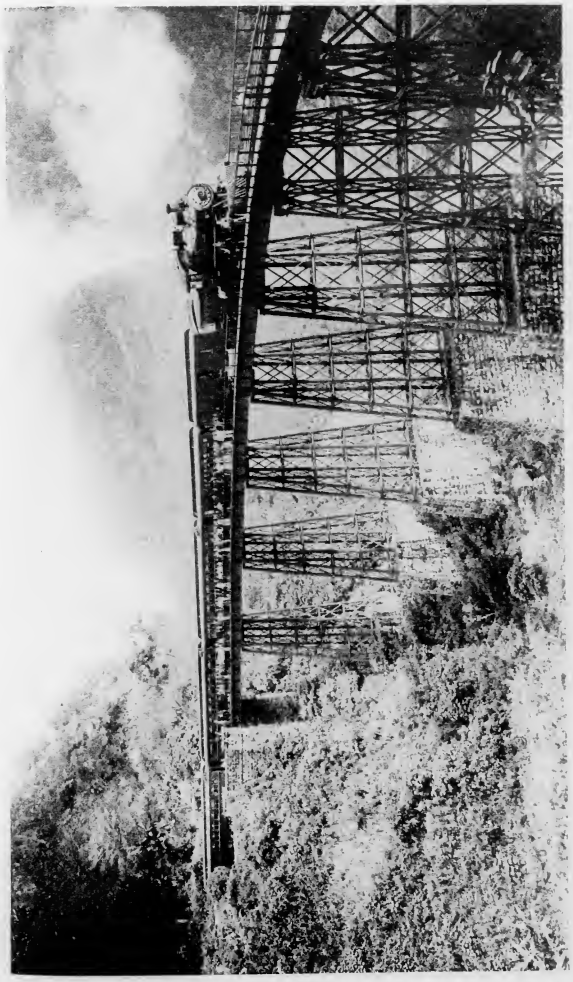
Mining accounts for about two-thirds of the Mexican export trade and mining supplies, machinery and tools form a very large proportion of the import trade. The railroad development is due to mining more than to all other industries combined. In fact, Mexican industrial progress, with but few exceptions, is measured in terms of mining. In the early days gold and silver were the only considered metals, and, leaving out oil, these two metals now account for about 60 per cent of Mexican mining production. In recent years copper has become of more consequence than gold and is pushing hard on silver.

Most of the gold mined in Mexico is in connection with silver. A large proportion of argentiferous ore carries some gold. There are, however, a number of localities where gold is or has been the chief value. Lower California, Chihuahua, Durango, Michoacán, Puebla, Sinaloa and Sonora are States in which gold mining as such has yielded good results.

Except in parts of the Gulf and Pacific coasts there are more or less productive mines in all parts of Mexico. The chief mineral zone extends from the United States frontier in the State of Chihuahua in an almost straight line to the Isthmus of Tehuantepec, and then bends northeast into Chiapas. The average width of this zone is about 50 miles, although in places it is much broader. Outside of this zone there are a number of important mineral belts. The best known mining districts are near the center of the main zone in Zacatecas, Durango, Querétero, Mexico (state), and Oaxaca.

Lead is very widely distributed. The best known localities are in connection with silver, but independent lead deposits are known and some are worked in Hidalgo, Querétero, Oaxaca, Jalisco and Puebla.

Less apparently is known of the extent of copper deposits, than of silver, lead, and gold, but that the copper resources of Mexico are enormous is beyond doubt. Of the copper districts may be mentioned the States of Michoacán, Mexico, Guerrero, Lower California, and



METLAC BRIDGE, MEXICAN RAILWAY.

The port of Veracruz has four railways, two of which connect it with the capital. The line of the Mexican Railway, the first one built in the Republic, is a most notable engineering feat and offers extraordinary scenic beauty. The Metlac Bridge, over the river of that name, is 138 meters long, 100 in radius, and 26 in height. The Metlac Viaduct, whose weight is estimated to be 600 tons, is 978 meters above the level of the sea.

especially Sonora. Silver, copper, lead and gold together account for over 90 per cent of Mexico's exportation of metals and metallic ores and 75 per cent of the exportation of all mineral products. Silver alone represents about one-half the metallic and over one-third the total mineral exportation. Copper, next in importance among metals represents about one-half the silver export trade.

Zinc, antimony, mercury, arsenic, manganese, iron, graphite, tin, and tungsten are all on the export basis generally as unrefined ores.

One of the most noteworthy features of the progress of Mexican mining development has been the remarkable growth of the petroleum industry. Throughout the Gulf coastal plain, from southern Tamaulipas to Campeche, there are indications of oil deposits, to a greater or less extent, derived from rocks of various ages in the shape of surface exudations of petroleum or liquid asphalt.

Most of the oils produced are heavy and more particularly adapted to use for fuel, but containing valuable refining products.

The record of petroleum production in Mexico since 1909, in barrels of 42 gallons each, is as follows:

	Barrels		Barrels
1909	2,765,000	1915	32,910,508
1910	4,099,000	1916	40,567,712
1911	13,655,488	1917	55,292,770
1912	16,844,066	1918	63,828,326
1913	24,574,500	1919	87,072,954
1914	25,725,403	1920	159,800,000

Manufacturing

Mexico has made steady advance in manufacturing activities, much of its mineral output being reduced within the country to the pure metals, and the native cotton being utilized in several well-organized factories to the output of cloth of various degrees of fineness.

There are also woolen mills, paper mills, factories for silk, and other textile products, sugar mills, breweries, steel plants, plants where raw tobacco and coffee are turned out in a finished state ready for the consumer, and noticeable effort has been made toward development of such industries as glassware, lumber and leather goods. The native Mexican has considerable natural ability for mechanical occupation, and in most cases makes a good workman.

Railways

There are in operation about 16,000 miles of railways in Mexico. The Government in recent years bought the controlling interest in several important lines and united them under the name of the National Railways of Mexico. This system and practically all of the privately

THE NORMAL SCHOOL IN MEXICO CITY FOR THE TRAINING OF TEACHERS AND PROFESSORS.

THE NATIONAL GEOLOGICAL INSTITUTE, MEXICO CITY.

especially Sonora. Silver, copper, lead and gold together account for over 90 per cent of Mexico's exportation of metals and metallic ores and 75 per cent of the exportation of all mineral products. Silver alone represents about one-half the metallic and over one-third the total mineral exportation. Copper, next in importance among metals represents about one-half the silver export trade.

Zinc, antimony, mercury, arsenic, manganese, iron, graphite, tin, and tungsten are all on the export basis generally as unrefined ores.

One of the most noteworthy features of the progress of Mexican mining development has been the remarkable growth of the petroleum industry. Throughout the Gulf coastal plain, from southern Tamaulipas to Campeche, there are indications of oil deposits, to a greater or less extent, derived from rocks of various ages in the shape of surface exudations of petroleum or liquid asphalt.

Most of the oils produced are heavy and more particularly adapted to use for fuel, but containing valuable refining products.

The record of petroleum production in Mexico since 1909, in barrels of 42 gallons each, is as follows:

	Barrels		Barrels
1909	2,765,000	1915	32,910,508
1910	4,099,000	1916	40,567,712
1911	13,655,488	1917	55,292,770
1912	16,844,066	1918	63,828,326
1913	24,574,500	1919	87,072,954
1914	25,725,403	1920	159,800,000

Manufacturing

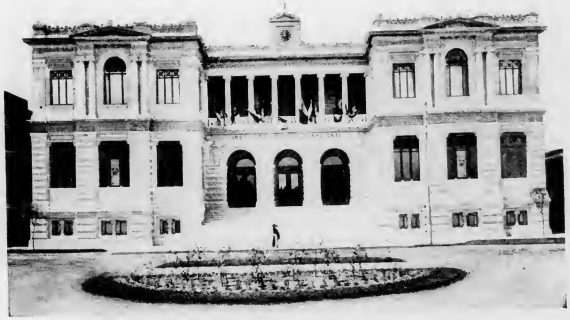
Mexico has made steady advance in manufacturing activities, much of its mineral output being reduced within the country to the pure metals, and the native cotton being utilized in several well-organized factories to the output of cloth of various degrees of fineness.

There are also woolen mills, paper mills, factories for silk, and other textile products, sugar mills, breweries, steel plants, plants where raw tobacco and coffee are turned out in a finished state ready for the consumer, and noticeable effort has been made toward development of such industries as glassware, lumber and leather goods. The native Mexican has considerable natural ability for mechanical occupation, and in most cases makes a good workman.

Railways

There are in operation about 16,000 miles of railways in Mexico. The Government in recent years bought the controlling interest in several important lines and united them under the name of the National Railways of Mexico. This system and practically all of the privately

THE NORMAL SCHOOL IN MEXICO CITY FOR THE TRAINING OF TEACHERS AND PROFESSORS.



THE NATIONAL GEOLOGICAL INSTITUTE, MEXICO CITY.

owned lines have been taken over and operated under the name of the Constitutionalist Railways of Mexico. This company owns 10,973 kilometers (6,818 miles) of track and controls an additional 1,802 kilometers (1,220 miles). The following roads are owned: National Railway, Mexican Central, Mexican International, Veracruz and Isthmus, Tehuantepec and Pan American Railway. The Interoceanic and Mexican Southern are controlled by the Government and form part of the National Railways system.

Among other important railways of the country, the following may be mentioned: Mexican Northwestern, 778 kilometers (482 miles); Northern Mexican, 133 kilometers (83 miles); Kansas City, Mexico and Orient, 367 kilometers (228 miles); United Railways of Yucatan, 858 kilometers (534 miles).

Education

The Federal Government has direct control over education in the Federal District and the Territories, while in the States the local governments have jurisdiction over the schools. Under the plan for restoring the Federal Department of Education, however, this Department will exercise a certain control over education throughout the country, in cooperation with the local authorities. Primary instruction is compulsory, but the enforcement of the law is extremely difficult. The present administration is making every effort to extend elementary education to all classes of the people, and a campaign against illiteracy has been waged so vigorously that by the end of 1920 some 2,000 voluntary teachers of illiterates were enrolled and great enthusiasm had been aroused. Popular and circulating libraries are being established, also special schools for workmen. The Government is also planning to improve vocational education, especially in agriculture, and is sending considerable numbers of students to the United States and other countries for technical instruction.

In the Federal District the primary course is 6 years in length, following which the pupil enters the secondary school. In 1920 a five-year secondary curriculum was adopted, including the following required subjects: Spanish grammar, composition and literature, English, French or German, arithmetic, algebra, plain and solid geometry, biological sciences, physics, chemistry, history, civics, logic, ethics, geography, music, drawing, manual training for boys and domestic science for girls, physical training and military drill. A considerable choice of electives is offered, among which are commercial branches, Latin and Greek roots, economics, sociology, astronomy, mineralogy

and geology, as well as advanced courses in many of the subjects mentioned above. There are normal schools for both sexes at the capital and throughout the republic. Agricultural instruction is given at the national schools of agriculture, veterinary medicine and agricultural mechanics at Mexico City and at some hundred institutions elsewhere in the country. The Government maintains two commercial schools and a Superior School of Commerce and Administration at the capital. Industrial schools for both sexes are found in all the principal cities.

The National University of Mexico, founded in 1553, is one of the most famous of Latin-American universities. It comprises Schools of Law, Medicine and Pharmacy, Dentistry, Engineering, Fine Arts, Music and Theatrical Art, the unique Graduate School and the new School of Chemical Sciences. At the federal capital are also the National Aviation School, Military Academy, School of Mines, Library School, International School of Archeology and Ethnology and a great number of scientific institutions and societies. Other centers of higher education are Guadalajara, with medical, engineering and law schools; Merida, having colleges of medicine and law and the State school of music; Morelia, the seat of the State University of Michoacan, comprising schools of law, medicine, engineering, agriculture, fine arts, natural sciences, and a normal department; Monterey, where there are schools of law and medicine; Oaxaca, with its medical college; Puebla and San Luis Potosí, each having schools of law and medicine; Querétaro, where there is an academy of fine arts; Toluca, with its law school, and Vera Cruz, seat of the Naval Academy.

THE PAN AMERICAN UNION is the international organization and office maintained in Washington, D. C., by the nineteen American republics, as follows: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Haiti, Mexico, Nicaragua, Panama, Paraguay, Peru, Republic of Central America (Guatemala, Salvador, Honduras), United States, Uruguay, and Venezuela. It is devoted to the development of commerce, friendly intercourse, good understanding and the preservation of peace among these countries. It is supported by quotas contributed by each country, based upon their population. Its affairs are administered by a Director General and Assistant Director, elected by and responsible to a Governing Board which is composed of the Secretary of State of the United States and the diplomatic representatives in Washington of the other American governments. These two executive officers are assisted by a staff of international experts, statisticians, commercial specialists, editors, translators, compilers, librarians, clerks and stenographers. The Union publishes a Monthly Bulletin in English, Spanish, and Portuguese, which is a careful record of Pan American progress. It also publishes numerous special reports and descriptive pamphlets on various Pan American subjects of practical information. Its library, the Columbus Memorial Library, contains 50,000 volumes, 175,000 index cards, and a large collection of maps. There is also a collection of 25,000 photographs, lantern slides and negatives. The Union is housed in a beautiful building erected through the munificence of Andrew Carnegie and the contributions of the American republics.

11-17-21—7M.

25864

END OF
TITLE